



Ansökan

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Information om ansökan Utllysningsnamn: Bidrag för planering av framtida excellenskluster inom banbrytande tekniker 2025 (Vetenskapsrådet) Bidragsform: Nätverksbidrag Sökt inriktning: Banbrytande tekniker Ämnesområde utlysning: NT, MH, HS, UV		
Projekttitel: Innovationer inom ultrasnabb laservetenskap – utveckling av källor och tillämpningar Projektstart: 2025-10-01 Projektslut: 2026-03-31 Sökt beredningsgrupp: VR-EXCBT Klassificeringskod: 10302. Atom- och molekylfysik och optik Nyckelord: Ultrafast lasers, Photon and charged-particle detection systems, Attosecond science, Ultrahigh-intensity laser research, Precision spectroscopy		
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Medverkande forskare: Mattias Marklund Födelsedatum: 19701210 Kön: Man Land: Sverige		
Dr-examen: 1998-05-28 Akademisk titel: Professor Arbetsgivare: Chalmers tekniska högskola		
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Medverkande forskare: László Veisz Födelsedatum: 19740320 Kön: Man Land: Sverige		
Dr-examen: 2003-08-28 Akademisk titel: Professor Arbetsgivare: Umeå universitet		

Projektinformation

Projekttitel (svenska)

Innovationer inom ultrasnabb laservetenskap – utveckling av källor och tillämpningar

Projekttitel (engelska)

Innovations in Ultrafast Laser Science – Source Development and Applications

Abstract och populärvetenskaplig beskrivning

Abstract (engelska)

Ultrafast laser science opens extraordinary possibilities to probe and control matter on femto- and attosecond timescales, driving discoveries in physics, chemistry, materials science, and medicine. Sweden is uniquely positioned to establish a world-leading **Excellence Cluster on Innovations in Ultrafast Laser Science**. Building on the Laserlab Sweden infrastructure network and a vibrant community of ~200 scientists from 8 universities, this initiative will gather top-tier expertise in 4 frontier areas: (1) **Advanced laser and detection systems**, pushing the limits of next-generation laser technologies, spatiotemporal field synthesis, and ultrafast diagnostics; (2) **Attosecond science**, advancing coherent XUV and X-ray sources for controlling electron dynamics; (3) **Ultrahigh-intensity laser–matter interactions**, developing compact accelerators and novel X-ray sources with transformative impact on medicine and industry; and (4) **Precision spectroscopy**, exploiting frequency-comb innovations for breakthroughs in astrophysics, quantum technologies, and communication systems. As part of the planning process, we will organize workshops and working groups to shape a unified scientific vision, foster collaborations across the academic partners, the health sector and industry, design the cluster's structure, and identify key research and training needs. The outcome will be a roadmap to position Sweden as global leader in ultrafast laser science – laying the foundation for a full proposal.

Populärvetenskaplig beskrivning (svenska)

Lasrar är en av de viktigaste uppfinningarna i modern tid och påverkar våra liv på sätt vi ofta tar för givet: de möjliggör internet, global kommunikation och de mest precisa klockor, läser streckkoder i butiker och används vid avancerade ögonoperationer och diagnostik. De mest spännande framstegen sker där lasrar pressar gränserna för vår kunskap, avslöjar naturens snabbaste skeenden och öppnar dörrar till nya teknologier.

Ultrasnabb laservetenskap utvecklar och tillämpar ljuspulser som kan vara så korta som en miljondels miljarddels sekund. Med dessa blixtar kan vi följa hur elektroner rör sig i atomer och molekyler eller hur material förändras i samma ögonblick som de påverkas av ljus. Insikterna är avgörande för framtidens elektronik, kvantteknologi samt nya medicinska och industriella tillämpningar.

Sverige har möjlighet att bli globalt ledande inom detta område, med flera framstående forskargrupper, både inom experiment och teori, och unika infrastrukturer. För att samla dessa styrkor föreslår vi att utreda bildandet av ett Excellenskluster för innovationer inom ultrasnabb laservetenskap, innefattande cirka 200 forskare vid 8 universitet.

Detta planeringsarbete omfattar fyra forskningsinriktningar med stor genombrottpotential: nya kraftfulla laser- och detektionssystem; attosekundspulser med hög intensitet och energi för att styra elektronladdningsöverföringar; extrema laser-plasma-interaktioner för kompakta partikelacceleratorer och avancerade röntgenkällor; samt precisionsspektroskopi för att mäta sammansättningen av stjärnor, exoplaneter och vår atmosfär.

Genom att bygga på infrastrukturnätverket Laserlab Sverige och samla landets expertis förutspår vi att ett sådant kluster inte bara kommer driva grundforskningen framåt, utan också utveckla teknologier med transformativ potential inom medicin, kommunikation och nya material. Samtidigt kommer det utbilda en ny generation forskare samt möta de samhällseliga utmaningar som följer med kraftfulla nya teknologier.

Beräknad projekttid

2025-10-01 - 2026-03-31

Planerad användning av forskningsinfrastruktur

Planerad användning av forskningsinfrastruktur

Ja

Forskningsinfrastruktur/er

Annan forskningsinfrastruktur

Laser infrastructures available within Laserlab Sweden

Övriga ansökningar och bidrag

Är någon eller flera av punkterna aktuella för dig?

Ja

Motivering och redogörelse för relationen mellan de olika projekten och/eller ansökningarna (engelska)

I currently hold a project grant from the Swedish Research Council on "Reactive intermediates in dicationic and higher charge states (Grant number 2023-03464) for the period January 2024 until December 2027. While this existing research grant focusses on spectroscopic investigations of reactive intermediates in higher charge states, the idea of planning in detail the possible formation of a Cluster of Excellence on Innovations in Ultrafast Laser Science, which the current proposal is about, is completely different. Hence, I together with 6 colleagues decided to submit an application dedicated for that purpose, which is not covered by any of our existing grants.

Planering för användning av bidraget

Planering för användning av bidraget (engelska)

Se nästa sida för bilaga.

Innovations in Ultrafast Laser Science

Source Development and Applications

Description of the research area

The first functional laser - a ruby laser - emitted its flashes of light in Theodor Maiman's laboratory in the 1960's, marking the beginning of laser science. Today, a world without lasers is inconceivable. They permeate nearly every aspect of science, technology and society, from ultra-precise sensing to high-tech production, medical diagnostics and treatment, as well as global communication. An important breakthrough was the ability to precisely control short light pulses in both the time and frequency domains, providing revolutionary insights into ultrafast processes on femto- and attosecond time scales^{1,2}, while also dramatically increasing the precision of spectroscopic measurements³. These advances were driven by several disruptive innovations in the 1980's, which sparked a revolution in laser technology, and laid the foundation for modern ultrafast science and precision frequency spectroscopy. Ultrafast laser science and its applications evolve rapidly, achieving shorter pulse durations, broader spectral ranges, higher pulse energies, increased repetition rates, and precise ultrashort pulse electromagnetic field synthesis for enhanced control of light-matter interactions⁴.

Sweden is today internationally recognized as one of the leaders in this field, developing and operating several research facilities distributed over the country. These interact through collaborations both in laser development and in applications, e.g., attosecond science, high-precision spectroscopy, materials science, and medical diagnostics. Most of these activities are already gathered within Laserlab Sweden⁵, a network of the key laser research infrastructures in Sweden, with nodes at the universities in Lund (LU), Stockholm (SU & KTH), Gothenburg (GU & Chalmers), Uppsala (UU), and Umeå (UmU). Laserlab Sweden was established in 2016 to facilitate cooperation between the different laboratories, and to represent Swedish laser-based research infrastructures nationally and internationally, as underpinned by its membership in Laserlab Europe AISBL⁶. Sweden plays an active role in major European initiatives such as ELI and EuPRAXIA, and has long experience of providing access for European users to Swedish laser facilities through Laserlab Europe.

By capitalizing on the Laserlab Sweden infrastructure network, we aim to establish an **Excellence Cluster on Innovations in Ultrafast Laser Science – Source Development and Applications**. During the planning phase, we will examine and develop further four promising Research Directions (RD):

RD1 - Development of advanced laser systems and new detection systems

Over the past decades, ultrafast laser technology has revolutionized science and industry by generating precisely tailored waveforms lasting only a few femtoseconds, enabling observation and control of processes in atomic, molecular, and solid-state systems on ultrafast timescales. Sweden has taken a prominent role in pushing the limits of optical parametric chirped pulse amplification⁷ (OPCPA) – a paradigm shift in ultrafast laser technology and its applications – implemented and further developed by dedicated programs in Lund, Stockholm and Umeå, each with globally recognized expertise in laser science^{7,8,9,10}. The envisioned cluster has the potential to unite these strengths to drive new developments towards shorter pulse durations at mid-infrared (mid-IR) wavelengths using novel laser materials and broadband parametric down-conversion, higher pulse energies, and higher repetition rates, and by developing optical spatiotemporal field synthesis. Along with the development of laser technology and secondary sources, advanced characterization tools and highly differential detection systems of charged particles and energetic photons are needed. The latter should ideally comprise both high energy and angular resolution, where again several partners of this planned cluster, e.g. Gothenburg, Uppsala, Umeå, and Lund, are among the leaders^{11,12}. Also, recently, the world's fastest video camera was developed in Lund¹³, which can provide novel insights and unique diagnostic possibilities by visualizing nonlinear processes on their natural scales in space and time.

Impacts: Atomic and Molecular Physics, Materials Science, Laser and Optics Industry.

RD2 - Attosecond science

Attosecond science, recognized by the 2023 Nobel Prize in Physics, is a blossoming research field that emerged at the beginning of the millennium, when attosecond light pulses in the eXtreme-UltraViolet (XUV) range, via High-order Harmonic Generation (HHG), were demonstrated. Attosecond metrology today allows reconstruction of electron motion with unprecedented temporal resolution. The field is expanding from isolated atoms to attosecond chemistry¹⁴ and condensed matter physics¹⁵, with the vision to track and control correlated electron dynamics with element-specific precision in complex systems as basis for new materials. This progress is driven by isolated attosecond pulse generation¹⁶, non-linear XUV pump–XUV probe techniques¹⁷, multi-particle correlation spectroscopy¹¹, and advanced theoretical support using, e.g., many-body theory¹⁸ and wave-packet techniques¹⁹. Another vibrant direction links attosecond science with quantum optics and quantum information²⁰. For many of the envisioned activities, a higher harmonic flux and/or an increase of photon energy towards the X-ray range are desirable – central technical challenges that a Cluster of Excellence could focus on. Research groups in Lund, Gothenburg, Stockholm, and Umeå, with vital expertise in these areas, are interconnected through several collaborations.

Impacts: Materials Science, Chemistry, Many-body Theory and Quantum Optics.

RD3 - Ultrahigh-intensity laser-matter interactions

Ultra-high intensity laser science is a rapidly advancing frontier, where focused laser pulses drive matter into the relativistic regime. Atoms are ionised into plasma, where strong fields drive particles to velocities close to the speed of light. Such compact laser–plasma accelerators hold the potential to revolutionize accelerator science and its applications. At the very highest intensities, interactions are predicted to enter the quantum regime, where particles can be created directly from the vacuum. Sweden is very well positioned in this field, with state-of-the-art experimental facilities and internationally recognised theoretical expertise. Lund is among the pioneers of laser–plasma acceleration and secondary X-ray sources²¹, with applications in precision radiotherapy and X-ray micro-tomography. Umeå advances vacuum acceleration to generate attosecond relativistic electron bunches and surface high-harmonic generation via relativistic oscillating mirrors, where plasma surfaces act as mirrors that efficiently up-convert laser light into the XUV and X-ray spectral range²². Gothenburg develops powerful simulation codes and theory, modelling laser–plasma acceleration, betatron radiation and strong-field quantum electrodynamics, providing predictive tools that guide and inspire new experiments^{23,24}. A vision is to establish a national infrastructure for ultra-high intensity laser research for transformative experiments in plasma physics, quantum electrodynamics, accelerator science, medical applications and advanced imaging technologies.

Impacts: Plasma Physics, Quantum Electrodynamics, Accelerator Technology, Medical Applications, and Advanced Imaging Technologies.

RD4 - Precision spectroscopy

The development of optical frequency combs in the early 2000s – recognized by the 2005 Nobel Prize in Physics – became a game changer in several fields including precision spectroscopy. Frequency combs, consisting of narrow spectral lines evenly spaced over a broad spectral range, are generated by ultrafast lasers with active optical-temporal phase control of the carrier wave. With different oscillator technologies, comb line spacings from a few MHz to GHz can be achieved. This combination of broad spectral coverage, high resolution, and inherent frequency calibration has enabled new possibilities in spectroscopy and metrology. Combs serve as frequency references for lasers in optical clocks and precision measurements, and can directly probe atomic and molecular species, revealing energy level structures with unprecedented spectral range and resolution. Sweden is among the leaders in comb-based Fourier-transform spectroscopy²⁵, achieving resolutions four orders of magnitude higher than conventional Fourier-transform IR spectroscopy based on incoherent light sources. Recently, Umeå applied this technique to broadband non-linear molecular spectroscopy, demonstrating the measurements of previously inaccessible hot-band transitions of astrophysically relevant species²⁶. At Chalmers, microcombs are developed for compact

optical atomic clocks, communications, and related applications²⁷. Furthermore, at GU, high precision laser spectroscopy focusses on electron affinity measurements of anions relevant, e.g., to understanding the interstellar medium and to anti-matter research²⁸.

Impacts: Environmental Monitoring, Astrophysics (revealing star & exoplanet compositions), and underpinning global technologies such as GPS, Telecommunications, and Internet Timing.

Network description and mode of cooperation

We propose a Cluster of Excellence that can bring together expertise from eight Swedish universities, involving ~200 scientists, in the key areas of ultrafast optics and laser development, advanced diagnostics and multi-faceted spectroscopies, attosecond science, materials science, quantum dynamics and many-body theory, high-intensity laser–matter interactions, as well as accelerator and radiation physics. For each of the research directions outlined above, with potential to be included in the cluster, the following experts represent the core of participants in the planning work, with the applicants of this proposal underlined and whose profiles are summarized below:

RD1 Laser and detector development

Lasers: Cord L. Arnold (LU), Valdas Pasiskevicius (KTH), László Veisz (UmU), Anne-Lise Viotti (LU), Ann-Kathrin Raab (GU); **Detection systems:** Raimund Feifel (GU), Richard J. Squibb (GU), Andreas Hult Roos (GU), Mathieu Gisselbrecht (LU), Jan-Erik Rubensson (UU), Marcus Agåker (UU), Johan Söderström (UU), Ronny Knut (UU), and Per Eng-Johnsson (LU).

RD2 Attosecond science

Experiments: Anne L'Huillier (LU), Per Eng-Johnsson (LU), Mathieu Gisselbrecht (LU), Cord L. Arnold (LU), Johan Mauritsson (LU), David Busto (LU), Anne-Lise Viotti (LU), László Veisz (UmU), Raimund Feifel (GU), Richard J. Squibb (GU), Andreas Hult Roos (GU); **Theory:** Eva Lindroth (SU), Jan Marcus Dahlström (LU), Markus Kowalewski (SU), and Hans Ågren (UU).

RD3 Ultrahigh-intensity laser-matter interactions

Experiments: László Veisz (UmU), Olle Lundh (LU), Claes-Göran Wahlström (LU), Joakim Bood (LU), Elias Kristiansson (LU); **Theory:** Mattias Marklund (Chalmers), Tünde Fülöp (Chalmers), and Gert Brodin (UmU).

RD4 Precision spectroscopy

Experiments: Aleksandra Foltynowicz (UmU), Valdas Pasiskevicius (KTH), Dag Hanstorp (GU), Victor Torres Company (Chalmers); **Theory:** Thomas Brage (LU), and Per Jönsson (Malmö University (MAU)).

The main applicant, Raimund Feifel, is an expert on multi-particle correlation spectroscopy used internationally in several laboratories, including facilities of the planned Cluster of Excellence. He is the head of the new high-power laser facility Attohallen²⁹ in Gothenburg.

The co-applicants, representing the four research directions and Laserlab Sweden, are:

- Cord L. Arnold, expert on the generation, characterisation and manipulation of IR – XUV ultrashort light pulses and their applications in ultrafast science.
- Anne L'Huillier, expert in high-order harmonic generation and applications of attosecond science to atomic physics.
- László Veisz, expert in laser and OPCPA development including characterization and applications in laser-plasma physics, and attosecond science.
- Mattias Marklund, expert on plasma theory, physics in strong fields, and simulations, with wide experience in experimental collaborations using high-intensity laser systems.
- Aleksandra Foltynowicz, expert in optical frequency combs and spectrometers, and their use for multispecies trace gas detection and molecular mid-IR precision spectroscopy, with focus on environmental and astrophysical applications.
- Valdas Pasiskevicius, coordinator of Laserlab Sweden and expert in laser technology, nonlinear optical materials and devices, precision sources for airborne and spaceborne molecular spectroscopy, ultrashort pulse generation, mid-IR, and THz field synthesis.

In practice many more scientists will contribute, and we note that all the participants have international collaborators which we will elaborate on in the full report of this planning grant, including descriptions of their involvement.

The present proposal aims to develop the overarching concept for an Excellence Cluster on Innovations in Ultrafast Laser Science, which will combine the strengths of major Swedish research environments in laser science and associated theory, with the potential for new, groundbreaking technologies in several areas. The 6-month planning phase will serve to:

- Define a shared scientific vision and identify key research topics and goals to focus on, including collaborative opportunities across the involved academic partners, the health sector and industry.
- Develop the organizational structure and governance model of the cluster, including coordination mechanisms, infrastructure sharing, and talent development strategies.
- Engage stakeholders across academia, medicine, industry, and international partners.
- Map existing resources and identify critical needs in terms of infrastructure, personnel, and funding.

Ultrafast laser science is foreseen to drive technological innovation with the potential to improve well-being and promote sustainable development. Yet, such advances can also be misused, especially in the case of dual-use technologies with both constructive and destructive applications. Meeting these challenges calls for an interdisciplinary approach that integrates ethical, legal, and societal aspects. We plan on involving social scientists already during the planning phase to assess opportunities and risks of emerging technologies, and embed ethical, legal, and societal perspectives into strategies for responsible innovation and policymaking.

Forms of collaboration

To begin with, the applicants of this proposal will organize a scientific workshop that brings together all participating researchers and relevant external experts, comprising international collaborators and representatives from industry, the health sector, and social sciences. This event will serve as a forum to define several thematic workshops taking place subsequently, and working groups led by the applicants, to align scientific priorities and foster collaboration. Also, one working group will assess the optimal usage and further development needs of the required infrastructures, capitalizing on the work done so far by Laserlab Sweden. And another working group will focus on defining an extended training network, combining experimental and theoretical aspects of the research directions involved, where we can build on an existing experimental graduate school in ultrafast science, organized by Laserlab Sweden. To increase the efficient transfer of knowledge and skills between the partners of this cluster, we will further explore the feasibility of setting up a Short-Term Scientific Mission program for the participating scientists, PhD and master students, to immerse into a partner group for acquiring deeper cutting-edge expertise. The outcome of these activities will be a comprehensive 20 A4-page report compiled by the main applicant, which will also serve as basis for a future full proposal.

References to our own works are indicated by asterisks.

¹ Zewail, Angewan. Chem. Int. Ed. Engl. **39**, 2586 (2000).

²*Isinger, Squibb, Busto, ..., Arnold, ..., Dahlström, Lindroth, Feifel, Gisselbrecht, L'Huillier, Science **358**, 893 (2017).

³ Udem, ... Hänsch, Nature **416**, 233 (2002).

⁴ Steinleitner *et al.*, Nat. Photon **16**, 512 (2022).

⁵ <https://laserlab-sweden.se/>

⁶ <https://laserlab-europe.eu/>

⁷*Veisz *et al.*, Nat. Photon, online since July 10, 2025

⁸*Mikaelsson, ... Mauritsson, L'Huillier, Gisselbrecht, Arnold, Nanophotonics **10**, 117 (2021).

⁹*Viotti *et al.*, Optica **9**, 197 (2022).

¹⁰*Mutter, ... Viotti, ... Pasiskevicius, APL Photonics **8**, 026104 (2023).

¹¹*Eland & Feifel, Oxford University Press 2017, ISBN: 9780198788980.

¹²*Agäker, ... Söderström, ... Rubensson, J. Synch. Rad. **32**, 1264 (2024).

¹³*Ehn, Bood, ... Kristensson, Sci. Appl. **6**, e17045 (2017).

¹⁴ Calegari & Martin, Commun. Chem. **6**, 184 (2023).

¹⁵*Vogelsang, ... Viotti, Arnold, L'Huillier, Mikkelsen, Adv. Phys. Res. **3**, 2300122 (2024).

¹⁶ G. Sansone *et al.*, Science **314**, 443 (2006).

¹⁷*Manschewetus, ... L'Huillier, Eng-Johnsson, PRA **93**, 061402 (2016).

¹⁸*Vinbladh, Dahlström, Lindroth, PRA **100**, 043424 (2019).

¹⁹*Guimaraes, ... Ågren, PRA **70**, 062504 (2004).

²⁰*Laurell, ... Squibb, Feifel, Gisselbrecht, Arnold, ... Lindroth, ... L'Huillier, Busto, Nat. Photon **19**, 352 (2025).

²¹*Svensson, ... Veisz, Lundh, Nat. Phys. **17**, 639 (2021).

²²*Kormin, ... Veisz, Nat. Com. **9**, 4992 (2018).

²³*Gonoskov, ... Marklund, Bulanov, Rev. Mod. Phys. **94**, 045001 (2022).

²⁴*Luo, ... Fülöp, Phys. Rev. Res. **6**, 013338 (2024).

²⁵*Rutkowski, ... Foltynowicz, Opt. Exp. **25**, 21711 (2017).

²⁶*Silva de Oliveira, ... Foltynowicz, Nat. Com. **15**, 161 (2024).

²⁷*Helgason, ... Torres-Company, Nat. Photon **17**, 992 (2023).

²⁸*Kristiansson, ... Hanstorp, Nat. Com. **13**, 5906 (2022).

²⁹*Squibb, ... Hult Roos, ... Arnold, Eng-Johnsson, L'Huillier, Feifel, Proc. SPIE **13537**, 1353705 (2025).

Beskrivning av meriter

Meritbeskrivning (engelska)

My qualifications strongly support my role as planning grant manager and responsible for preparing a full report on the possibility of forming an Excellence Cluster on Innovations in Ultrafast Laser Science. I have a proven track record in initiating and coordinating multi-institutional research projects, building lasting national and international collaborations, and managing large research grants. Over the years, I was the main proposer of many successful research proposals, including several major grants from the Knut and Alice Wallenberg Foundation involving multiple Swedish universities. I have developed scientific instrumentation adopted by several laboratories in the world and led numerous extensive campaigns at large-scale synchrotron radiation and free electron laser facilities which also involved theoreticians. My longstanding partnership with the Lund Laser Centre and the successful establishment of the new Attohallen facility in Gothenburg reflect my capacity to bridge institutions and expertise. These efforts have resulted in many high-impact publications, including pioneering work in attosecond pulse shaping and time delay measurements referenced in the 2023 Nobel Prize in Physics summary.

I place strong emphasis on collaborative leadership, supporting new ideas and inspiring early-career researchers to be in charge of their contributions. I have supervised 9 PhD students, 6 postdocs, and over 50 MSc/BSc students, and mentored assistant professors, many of whom now hold leading roles in academia or industry. I am currently the main supervisor of 2 PhD students (+2 more to be appointed) and 1 postdoc, and I am the Swedish host of 1 VR-funded postdoc in the US.

I contribute to scientific community-building through conference organization, lecturing, commissions of trust and equal opportunity work. I regularly organize network meetings and contribute to training activities that foster cohesion and excellence—principles vital for a future Excellence Cluster.

Sökandes publikationer och andra forskningsoutputs (engelska)

Se nästa sida för bilaga.

Publication list of Raimund Feifel

Bibliometric information:

My complete list of publications comprises **255 works**. I have 226 original articles published in scientific peer-reviewed journals, 22 peer-reviewed conference contributions, 2 topical review articles, 1 topical book, 1 editorial, 2 institutional highlight reports and 1 popular science article. I have 1 paper in Science, 3 papers in Sci. Adv., 3 papers in Nature, 1 paper in Nat. Phys., 2 papers in Nat. Chem., 2 papers in Nat. Photon., 8 papers in Nat. Commun., 2 papers in JACS, 1 paper in PNAS, 3 papers in Phys. Rev. X, 19 papers in Phys. Rev. Lett., 1 paper in Chem. Sci., 1 paper in Inorg. Chem., 1 paper in Commun. Phys., 1 paper in Commun. Chem., etc. My total number of citations is > 8400, and my h-index is 48 (Google Scholar August 17, 2025).

Selection of 10 research outputs most relevant to the proposal:

1. Attohallen – a new attosecond science facility in Sweden
R.J. Squibb, M. Zaki, H. Coudert-Alteirac, S. Maclot, A. Hulth Roos, N. Ranjan Behera, V. Ideböhn, E. Olsson, M. Al Hashemi, L. Antonsson, A. Gerbandier, Z. Betül Duman, C. Arnold, P. Eng-Johnsson, A. L'Huillier, and **R. Feifel**
Proc. SPIE **13537**, Compact Radiation Sources from EUV to Gamma-rays: Development and Applications II, 1353705 (2025).
Scientific driver behind Gothenburg's first high-power laser facility Attohallen, which is one of the many results of a previous Knut and Alice Wallenberg project which I obtained as main PI together with Anne L'Huillier (co-proposer) and other partners of the planned cluster (Eva Lindroth, Mathieu Gisselbrecht), and which I successfully coordinated.
2. Symmetry-breaking in core-valence double ionisation of allene
V. Ideböhn, R. Linguerri, L.M. Cornetta, E. Olsson, M. Wallner, R.J. Squibb, R.C. Coutos, L. Karlsson, G. Nyman, M. Hochlaf, J.H.D. Eland, H. Ågren, and **R. Feifel**
Commun. Chem. **6**, 137 (2023).
PI/team leader of a core-valence double-ionization study of allene, as part V. Ideböhn's PhD thesis, which revealed the effect of dynamical core-hole localization and symmetry breaking in an extraordinary way. This work connects to electron-correlation-driven charge-migration studies as part of one of the possible research directions of the proposed cluster.
3. Abiotic molecular oxygen production - ionic pathway from sulphur dioxide
M. Wallner, M. Jarraya, S. Ben Yaghlane, E. Olsson, V. Ideböhn, R.J. Squibb, G. Nyman, J.H.D. Eland, **R. Feifel**, M. Hochlaf, Sci. Adv. **8**, eabq5411 (2022). **Shared senior author**
PI/team leader of a double ionisation study on SO₂, as part of M. Wallner's PhD thesis, where a multi-particle correlation technique comprising energy-resolved electron and mass-resolved ion fragmentation analysis, which I am one of the pioneers on, was used. We propose to build on this technique in the cluster envisioned.
4. Attosecond timing of electron emission from a molecular shape resonance
S. Nandi, E. Plesiat, S. Zhong, A. Palacios, D. Busto, M. Isinger, L. Neoricic, C.L. Arnold, R.J. Squibb, **R. Feifel**, P. Decleva, A. L'Huillier, F. Martin, and M. Gisselbrecht
Sci. Adv. **6**, 7762 (2020).
A show case attosecond electron emission time delay study on N₂ driven by M. Gisselbrecht (part of the planned cluster), with theory support by Fernando Martin (putative international collaborator of this cluster), where high temporal and high spectral resolution were combined using one of my state-of-the-art multi-particle correlation spectrometers.
5. Attosecond electron-spin dynamics in Xe 4d photoionization
S. Zhong, J. Vindbladh, D. Busto, R.J. Squibb, M. Isinger, L. Neoricic, H. Laurell, R. Weissenbilder, C.L. Arnold, **R. Feifel**, J.M. Dahlström, G. Wendin, M. Gisselbrecht, E. Lindroth, and A. L'Huillier, Nat. Commun. **11**, 5042 (2020).
An attosecond electron spin dynamics study on Xe driven by Anne L'Huillier (co-proposer) carried out with high temporal and high spectral resolution, the latter thanks to one of my state-of-the-art spectrometers. This work also exemplifies the indispensable theory collaboration with Eva Lindroth and Marcus Dahlström (both part of the cluster envisioned).

6. Coulomb Explosion of CD₃I induced by single photon deep inner shell ionisation
M. Wallner, J.H.D. Eland, R.J. Squibb, J. Andersson, A. Hult Roos, R. Singh, O. Talaei, D. Koulentianos, M.N. Piancastelli, M. Simon, and **R. Feifel**, Sci. Rep. **10**, 1246 (2020).
PI/team leader of a multi-ionisation study of CD₃I, as part of M. Wallner's PhD thesis. Here one of the latest variants of the magnetic bottle multi-particle correlation technique with spatial resolution for ions, which I am one of the inventors for, was used. We plan to build on this technique in the cluster activities envisioned.
7. Parametrisation of energy sharing distributions in direct double photoionisation of He
J. Andersson, S. Zagardskikh, A. Hult Roos, O. Talaei, R.J. Squibb, D. Koulentianos, M. Wallner, V. Zhaunerchyk, R. Singh, J.H.D. Eland, J.M. Rost, and **R. Feifel**
Sci. Rep. **9**, 17883 (2019).
PI/team leader of a double ionisation study on He, which was part of J. Andersson's PhD thesis. This work shows how we obtain energy sharing information on electron pairs, which parts of the planned cluster activities can build on in a time-resolved fashion.
8. Photoionization in the time and frequency domain
M. Isinger, R.J. Squibb, D. Busto, S. Zhong, A. Harth, D. Kroon, C.L. Arnold, M. Miranda, J.M. Dahlström, E. Lindroth, **R. Feifel**, M. Gisselbrecht, and A. L'Huillier
Science **358**, 893 (2017).
Seminal work driven by Anne L'Huillier (co-proposer) with theory by Eva Lindroth and M. Dahlström (both being part of the planned cluster) which shows that high temporal combined with high spectral resolution, using one of my state-of-the-art spectrometers, is key to selective information on electron dynamics. The cluster activities can build on that.
9. Ultrafast molecular three-electron Auger process
R. Feifel, J.H.D. Eland, R.J. Squibb, M. Mücke, S. Zagardskikh, P. Linusson, F. Tarantelli, P. Kolorenc, and V. Averbukh, Phys. Rev. Lett. **116**, 073001 (2016).
Seminal work driven by me which demonstrates the emission of a *single* high-energy "collective" Auger electron upon filling a double-inner-shell vacancy, using the multi-particle-correlation technique which I helped to pioneer. We plan on utilizing this distinct type of Auger decay for tracking attosecond dynamics in the cluster activities envisioned.
10. Dynamics of hollow atom formation in intense x-ray pulses mapped by partial covariance
L.J. Frasinski, V. Zhaunerchyk, M. Mücke, R.J. Squibb, M. Siano, J.H.D. Eland, P. Linusson, P.v.d. Meulen, P. Salén, R.D. Thomas, M. Larsson, L. Foucar, J. Ullrich, K. Motomura, S. Mondal, K. Ueda, T. Osipov, L. Fang, B.F. Murphy, N. Berrah, C. Bostedt, J.D. Bozek, S. Schorb, M. Messerschmidt, J.M. Glowia, J.P. Cryan, R.N. Coffee, O. Takahashi, S. Wada, M.N. Piancastelli, R. Richter, K.C. Prince, and **R. Feifel**
Phys. Rev. Lett. **111**, 073002 (2013).
PI/ team leader of a large international experimental campaign at the free electron laser LCLS at Stanford where we introduced the innovative multi-particle correlation method of partial covariance at low repetition rate light sources, a method which we plan to build on in the cluster activities envisioned. This large collaboration was initiated and driven by me.

Relevant peer-reviewed research outputs from 2017 – 2025:

Peer-reviewed original articles (numbered according to my complete list of publications):

- 226 Non-ergodic dissociative valence double ionization of SF₆
E. Olsson, V. Daver Ideböhn, M. Wallner, R.J. Squibb, J.H.D. Eland, E. Erdmann, and **R. Feifel**, Sci. Rep. **15**, 20751 (2025).
- 224 Core-valence double ionization of carbon suboxide
E. Olsson, L.M. Cornetta, V. Daver Ideböhn, M. Wallner, M. Parriani, R.J. Squibb, G. Öhrwall, S. Falcinelli, L. Karlsson, J.H.D. Eland, H. Ågren, and **R. Feifel**
Sci. Rep. **15**, 15765 (2025).
- 221 Characterization of the electronic structure and fate of doubly ionized carbon diselenide
M. Parriani, E. Olsson, V. Daver Ideböhn, M. Wallner, R.J. Squibb, G. Nyman, S. Falcinelli, J.H.D. Eland, M. Hochlaf, and **R. Feifel**, Sci. Rep. **15**, 6664 (2025).

- 218 Measuring the quantum state of photoelectrons
H. Laurell, S. Luo, R. Weissenbilder, M. Ammitzbo, S. Ahmed, H. Söderberg, C.L.M. Petersson, V. Poulain, C. Guo, C. Dittel, D. Finkelstein-Shapiro, R.J. Squibb, **R. Feifel**, M. Gisselbrecht, C.L. Arnold, A. Buchleitner, E. Lindroth, A.F. Kockum, A. L'Huillier, and D. Busto, Nat. Photon. **19**, 352 (2025).
- 216 Strong-field quantum control by pulse shaping in the extreme ultraviolet domain
F. Richter, U. Saalman, E. Allaria, M. Wollenhaupt, B. Arndt, A. Brynes, C. Callegari, G. Cerullo, M. Danailov, A. Demidovich, K. Dulitz, **R. Feifel**, M. Di Fraia, S. Dev Ganeshamandiram, L. Giannessi, N. Götz, S. Hartweg, B. von Issendorff, T. Laarmann, F. Landmesser, Y. Li, M. Manfredda, C. Manzoni, M. Michelbach, A. Morlok, M. Mudrich, A. Ngai, I. Nikolov, N. Pal, F. Pannek, G. Penco, O. Plekan, K.C. Prince, N. Rendler, G. Sansone, A. Simoncig, F. Stienkemeier, R.J. Squibb, P. Susnjär, M. Trovo, D. Uhl, B. Wouterlood, M. Zangrando, and L. Bruder, Nature **636**, 337 (2024).
- 215 Anisotropy parameters from shapes of ion-ion correlation features of fragmenting molecules, E. Olsson, M. Wallner, R.J. Squibb, V. Ideböhn, M. Parriani, M.A. Parkes, S.D. Price, J.H.D. Eland and **R. Feifel**, Sci. Rep. **14**, 28766 (2024).
- 213 Structure and fragmentation of doubly ionized HNCS
M. Wallner, E. Olsson, V. Ideböhn, M. Parriani, R.J. Squibb, S. Lundberg, D. Cole, S. Falcinelli, S. Stranges, B. Brunetti, J.M. Dyke, G. Nyman, J.H.D. Eland, M. Hochlaf, and **R. Feifel**, J. Chem. Phys. **161**, 044313 (2024).
- 211 Ultrafast Electronic Relaxation Pathways of UV-excited Quadricyclane
K.D. Borne, J.C. Cooper, M.N.R. Ashfold, J. Bachmann, S. Bhattacharyya, R. Boll, M. Bonanomi, M. Bosch, C. Callegari, M. Centurion, M. Coreno, B.F.E. Curchod, M.B. Danailov, A. Demidovich, M. Di Fraia, B. Erk, D. Faccialà, **R. Feifel**, R.J.G. Forbes, C.S. Hansen, D.M.P. Holland, R.A. Ingle, R. Lindh, L. Ma, R. Mason, H.G. McGhee, S. Bhavya Muvva, J.P. Figueira Nunes, A. Odate, S. Pathak, O. Plekan, K.C. Prince, P. Rebernik, A. Rouzée, A. Rudenko, A. Simoncig, R.J. Squibb, A. Selvam Venkatachalam, C. Vozzi, P.M. Weber, A. Kirrander, and D. Rolles, Nat. Chem. **16**, 499 (2024).
- 209 Ultra-stable and versatile high-energy resolution set-up for attosecond photoelectron spectroscopy, S. Luo, R. Weissenbilder, H. Laurell, M. Ammitzböll, V. Poulain, D. Busto, L. Neoricic, C. Guo, S. Zhong, D. Kroon, R.J. Squibb, **R. Feifel**, M. Gisselbrecht, A. L'Huillier, and C.L. Arnold, Adv. Phys. X **8**, 2250105 (2023).
- 206 = Publication 2 “Symmetry-breaking in ...” of the selection presented above.
- 203 Attosecond coherent control of electronic wave packets in two-color photoionisation using a novel timing tool for seeded free-electron-laser
P. Kumar Maroju, M. Di Fraia, O. Plekan, M. Bonanomi, B. Merzuk, D. Busto, I. Makos, M. Schmoll, R. Shah, P. Rebernik Ribic, L. Giannessi, G. De Ninno, C. Spezzani, G. Penco, A. Demidovich, M. Danailov, M. Coreno, M. Zangrando, A. Simoncig, R.J. Squibb, **R. Feifel**, S. Bengtsson, E. Rose Simpson, T. Csizmadia, M. Dumergue, S. Kühn, K. Ueda, J. Li, Kenneth J. Schafer, F. Frassetto, L. Poletto, K.C. Prince, J. Mauritsson, C. Callegari, and G. Sansone, Nat. Photon. **17**, 200 (2023).
- 200 Photochemical ring-opening reaction of 1,3-cyclohexadiene: the true reactive state
O. Travnikova, T. Piteša, A. Ponzi, M. Sapunar, R.J. Squibb, R. Richter, P. Finetti, M. Di Fraia, A. De Fanis, N. Mahne, M. Manfredda, V. Zhaunerchyk, T. Marchenko, R. Guillemin, L. Journal, K.C. Prince, C. Callegari, M. Simon, **R. Feifel**, P. Decleva, N. Došlić and M.N. Piancastelli, J. Am. Chem. Soc. **144**, 21878 (2022).
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- 197 Formation and relaxation of K^{-2} and $K^{-2}V$ double-core-hole states in *n*-butane
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- 196 Observation of Rabi dynamics with a short-wavelength Free-Electron Laser
S. Nandi, E. Olofsson, M. Bertolino, S. Carlström, F. Zapata, D. Busto, C. Callegari, M. Di Fraia, P. Eng-Johnsson, **R. Feifel**, G. Gallician, M. Gisselbrecht, S. Maclot, L. Neoricic, J. Peschel, O. Plekan, K.C. Prince, R.J. Squibb, S. Zhong, P.V. Demekhin, M. Meyer, C. Miron, L. Badano, M.B. Danailov, L. Giannessi, M. Manfreda, F. Sottocorona, M. Zangrando, and J.M. Dahlström, Nature **608**, 488 (2022).
- 195 An experimental and theoretical characterization of the electronic structure of doubly ionised disulfur
E. Olsson, T. Ayari, V. Ideböhn, M. Wallner, R.J. Squibb, J. Andersson, A. Hult Roos, S. Stranges, J.M. Dyke, J.H.D. Eland, M. Hochlaf, and **R. Feifel**
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- 190 Following UV-induced electronic dynamics of thiouracil by ultrafast x-ray photoelectron spectroscopy, D. Mayer, F. Lever, D. Picconi, J. Metje, S. Alisauskas, F. Calegari, S. Düsterer, C. Ehlert, **R. Feifel**, M. Niebuhr, B. Manschwetus, M. Kuhlmann, T. Mazza, M.S. Robinson, R.J. Squibb, A. Trabattoni, M. Wallner, P. Saalfrank, T.J.A. Wolf, and M. Gühr, Nat. Commun. **13**, 198 (2022).
- 188 Single photon double and triple ionization of allene
V. Ideböhn, A.J. Sterling, M. Wallner, E. Olsson, R.J. Squibb, U. Miniotaite, E. Forsmalm, M. Forsmalm, S. Stranges, J.M. Dyke, F. Duarte, J.H.D. Eland, and **R. Feifel**
Phys. Chem. Chem. Phys. **24**, 786 (2022).
- 185 Unimolecular double photoionization-induced processes in iron pentacarbonyl
R. Linguerri, E. Olsson, G. Nyman, M. Hochlaf, J.H.D. Eland, and **R. Feifel**
Inorg. Chem. **60**, 17966 (2021).
- 183 State selective fragmentation of doubly ionized sulphur dioxide
M. Jarraya, M. Wallner, G. Nyman, S. Ben Yaghlane, M. Hochlaf, J.H.D. Eland and **R. Feifel**, Sci. Rep. **11**, 17137 (2021).
- 172 = Publication 4 “Attosecond timing of ...” of the selection presented above.
- 171 = Publication 5 “Attosecond electron-spin dynamics ...” of the selection presented above.
- 169 Tracking the Ultraviolet Photochemistry of Thiophenone During and Beyond the Initial Ultrafast Ring Opening
S. Pathak, L.M. Ibele, R. Boll, C. Callegari, A. Demidovich, B. Erk, **R. Feifel**, R. Forbes, M. Di Fraia, L. Giannessi, C.S. Hansen, D.M.P. Holland, R.A. Ingle, R. Mason, O. Plekan, K.C. Prince, A. Rouzée, R.J. Squibb, J. Tross, M.N.R. Ashfold, B.F.E. Curchod, and D. Rolles, Nat. Chem. **12**, 795 (2020).
- 167 Tracking Attosecond Electronic Coherences using Phase-Manipulated Extreme Ultraviolet Pulses, A. Wituschek, L. Bruder, E. Allaria, U. Bangert, M. Binz, C. Callegari, G. Cerullo, L. Gianessi, P. Cinquegrana, M. Danailov, A. Demidovich, M. di Fraia, M. Drabbels, **R. Feifel**, T. Laarman, R. Michiels, N.S. Mirian, M. Mudrich, I. Nikolov, F.H. O'Shea, G. Penco, P. Piseri, O. Plekan, K.C. Prince, A. Przystawik, P.R. Ribic, G. Sansone, P. Sigalotti, S. Spampinati, C. Spezzani, R.J. Squibb, S. Stranges, D. Uhl, and F. Stienkemeier, Nat. Commun. **11**, 883 (2020).
- 166 Double and triple ionisation of isocyanic acid
J.H.D. Eland, R.J. Squibb, A.J. Sterling, M. Wallner, A. Hult Roos, J. Andersson, V. Axelsson, E. Johansson, A. Teichter, S. Stranges, B. Brunetti, J.M. Dyke, F. Duarte, and **R. Feifel**, Sci. Rep. **10**, 2288 (2020).
- 165 Attosecond Pulse-shaping using a seeded Free Electron Laser
P. Maraju, C. Grazioli, M. Fraia, M. Moiola, D. Ertel, H. Ahmadi, O. Plekan, P. Finetti, E. Allaria, L. Giannessi, G. Ninno, C. Spezzani, G. Penco, A. Demidovich, M. Danailov, R. Borghes, G. Kourousias, C.E. Sanches Dos Reis, F. Billé, A. Lutman, R.J. Squibb, **R. Feifel**, P. Carpeggiani, M. Reduzzi, T. Mazza, M. Meyer, S. Bengtsson, N. Ibrakovic, E.

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- 164 = Publication 6 “Coulomb Explosion of CD_3I ...” of the selection presented above.
- 163 = Publication 7 “Parametrisation of energy sharing ...” of the selection presented above.
- 162 Triple ionisation of HCl *via* states with a 2p core hole
J.H.D. Eland, and **R. Feifel**, *J. Chem. Phys.* **151**, 114301 (2019).
- 161 Femtosecond-resolved observation of the fragmentation of buckminsterfullerene following X-ray multi-photon ionization
N. Berrah, A. Sanchez-Gonzalez, Z. Jurek, R. Obaid, H. Xiong, R.J. Squibb, T. Osipov, A. Lutman, L. Fang, T. Barillot, J.D. Bozek, J. Cryan, T.J.A. Wolf, D. Rolles, R. Coffee, K. Schnorr, S. Augustin, H. Fukuzawa, K. Motomura, N. Niebuhr, L.J. Frasinski, **R. Feifel**, C.P. Schulz, K. Toyota, S.-K. Son, K. Ueda, T. Pfeifer, J.P. Marangos, and R. Santra, *Nat. Phys.* **15**, 1279 (2019).
- 159 Relative extent of triple Auger decay in CO and CO_2
A. Hult Roos, J.H.D. Eland, J. Andersson, M. Wallner, R.J. Squibb, and **R. Feifel** *Phys. Chem. Chem. Phys.* **21**, 9889 (2019).
- 157 Dissociations of water ions after valence and inner-valence ionization
A. Hult Roos, J.H.D. Eland, J. Andersson, R.J. Squibb, and **R. Feifel** *J. Chem. Phys.* **149**, 204307 (2018).
- 156 Abundance of molecular triple ionization by double Auger decay
A. Hult Roos, J.H.D. Eland, J. Andersson, R.J. Squibb, D. Koulentianos, O. Talaee, and **R. Feifel**, *Sci. Rep.* **8**, 16405 (2018).
- 154 KL double core hole pre-edge states of HCl
D. Koulentianos, R. Püttner, G. Goldsztejn, T. Marchenko, O. Travnikova, L. Journal, R. Guillemin, D. Céolin, M.N. Piancastelli, M. Simon, and **R. Feifel** *Phys. Chem. Chem. Phys.* **20**, 2724 (2018).
- 152 Acetylacetone photodynamics at a seeded free-electron laser
R.J. Squibb, M. Sapunar, A. Ponzi, R. Richter, A. Kivimäki, O. Plekan, P. Finetti, N. Sisourat, V. Zhaunerchyk, T. Marchenko, L. Journal, R. Guillemin, R. Cucini, M. Coreno, C. Grazioli, M. Di Fraia, C. Callegari, K.C. Prince, P. Decleva, M. Simon, J.H.D. Eland, N. Doslic, **R. Feifel**, M.N. Piancastelli, *Nat. Comm.* **9**, 63 (2018). **Shared senior author**
- 151 = Publication 7 “Photoionization in the time and ...” of the selection presented above.

During 2017-2025, I produced additional 52 publications, which do not fit within the page limit. Please see: <https://scholar.google.ca/citations?user=CmFatc4AAAAJ&hl=en>.

Peer-reviewed conference contributions:

- 22 = Publication 1 “Attohallen – a new attosecond ...” of the selection presented above.

During 2017-2025, I produced additional 4 conference contributions, which do not fit within the page limit. Please see: <https://scholar.google.ca/citations?user=CmFatc4AAAAJ&hl=en>.

Peer-reviewed books and book chapters:

- 1 Double Photoionisation Spectra of Molecules
J.H.D. Eland and R. Feifel, *Oxford University Press* 2017. ISBN: 9780198788980

Relevant non-peer-reviewed research outputs from 2017 – 2025:

- 5 Editorial on “Ions, electrons, coincidences and dynamics: Festschrift for John H.D. Eland”
R. Feifel, M. Hochlaf, and S. Price, *Phys. Chem. Chem. Phys.* **25**, 5911 (2023).

Medverkande forskares publikationer och andra forskningsoutputs (engelska)

Se nästa sida för bilaga.

Publication list of Cord L. Arnold

Bibliometric information:

95 peer-reviewed journal articles, 2 book chapters, 5 patents, 9 conference proceedings, > 5500 citations (in total), h-index 42, i10-index 74 (Source: Google Scholar).

Selected of 10 publications most relevant to the project:

1. A.-K. Raab, M. Redon, S. Roscam Abbing, Y. Fang, C. Guo, P. Smorenburg, J. Mauritsson, A.-L. Viotti, A. L'Huillier, **C.L. Arnold**, *XUV yield optimization of two-color high-order harmonic generation in gases* Nanophotonics (2025).
2. D. Díaz Rivas, A.-K. Raab, C. Guo, A.-L. Viotti, A. L'Huillier, and **C.L. Arnold**, *Measurement of Ultrashort Laser Pulses with a Time-Dependent Polarization State Using the D-Scan Technique* J. Phys. Phot. **6**, 015003 (2024).
3. C. Guo, M. Miranda, A.-K. Raab, A.-L. Viotti, P.T. Guerreiro, R. Romero, H. Crespo, A. L'Huillier, **C.L. Arnold**, *Single-Shot, High-Repetition Rate Carrier-Envelope-Phase Detection of Ultrashort Laser Pulses* Opt. Lett. **48**(20), 5431 (2023).
4. S. Luo, R. Weissenbilder, H. Laurell, M. Ammitzböll, V. Poulain, D. Busto, L. Neoričić, C. Guo, S. Zhong, D. Kroon, R.J. Squibb, R. Feifel, M. Gisselbrecht, A. L'Huillier, **C.L. Arnold**, *Ultra-stable and versatile high-energy resolution setup for attosecond photoelectron spectroscopy* Adv. Phys. X. **8**(01), 1 (2023). (Invited)
5. I. Sytceвич, A.-L. Viotti, C. Guo, J. Vogelsang, F. Langer, A. L'Huillier and **C.L. Arnold**, *Few-cycle short-wave-infrared light source for strong-field experiments at 200 kHz repetition rate* Opt. Express **30**(15), 27858 (2022).
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7. M. Isinger, R.J. Squibb, D. Busto, S. Zhong, A. Harth, D. Kroon, S. Nandi, **C.L. Arnold**, M. Miranda, J.M. Dahlström, E. Lindroth, R. Feifel, M. Gisselbrecht, and A. L'Huillier, *Photoionization in the time and frequency domain* Science, **358**, 893 (2017).
8. C.M. Heyl, H. Coudert-Alteirac, M. Miranda, M. Louisy, K. Kovacs, V. Tosa, E. Balogh, K. Varjú, A. L'Huillier, A. Couairon, **C.L. Arnold**, *Scale-invariant nonlinear optics in gases* Optica **3**, 75 (2016).
9. M. Miranda, M. Kotur, P. Rudawski, C. Guo, A. Harth, A. L'Huillier, and **C.L. Arnold**, *Spatiotemporal characterization of ultrashort laser pulses using spatially-resolved Fourier transform spectrometry* Opt. Lett. **39**, 5142--5145 (2014).
10. M. Miranda, T. Fordell, **C.L. Arnold**, A. L'Huillier, and H. Crespo, *Simultaneous compression and characterization of ultrashort laser pulses using chirped mirrors and glass wedges* Opt. Express **20**, 688--697 (2012).

Publication list of Aleksandra Foltynowicz

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Selected publications most relevant to the project:

1. A. Hjältén, V. Silva de Oliveira, I. Silander, A. Rosina, M. Rey, L. Rutkowski, G. Soboń, K. K. Lehmann, and **A. Foltynowicz**, *Measurement and assignment of $J = 5$ to 9 rotational energy levels in the $9070\text{--}9370\text{ cm}^{-1}$ range of methane using optical frequency comb double-resonance spectroscopy* *J. Chem. Phys.* **161**, 124311 (2024).
2. V. Silva de Oliveira, I. Silander, L. Rutkowski, G. Soboń, O. Axner, K.K. Lehmann, and **A. Foltynowicz**, *Sub-Doppler optical-optical double-resonance spectroscopy using a cavity-enhanced frequency comb probe* *Nat. Commun.* **15**, 161 (2024).
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7. L. Rutkowski, P. Masłowski, A. C. Johansson, A. Khodabakhsh, and **A. Foltynowicz**, *Optical frequency comb Fourier transform spectroscopy with sub-nominal resolution and precision beyond the Voigt profile* *J. Quant. Spectr. Radiat. Transf.* **204**, 63-73 (2018).
8. L. Rutkowski, A.C. Johansson, G. Zhao, T. Hausmaninger, A. Khodabakhsh, O. Axner, and **A. Foltynowicz**, *Sensitive and broadband measurement of dispersion in a cavity using a Fourier transform spectrometer with kHz resolution* *Opt. Express* **25**, 21711-18 (2017).
9. G. Soboń, T. Martynkien, P. Mergo, L. Rutkowski, and **A. Foltynowicz**, *High-power frequency comb source tunable from 2.7 to $4.2\text{ }\mu\text{m}$ based on difference frequency generation pumped by an Yb-doped fiber laser* *Opt. Lett.* **42**, 1748-51 (2017). (editor's choice)
10. P. Masłowski, K.F. Lee, A.C. Johansson, A. Khodabakhsh, G. Kowzan, L. Rutkowski, A.A. Mills, C. Mohr, J. Jiang, M.E. Fermann, and **A. Foltynowicz**, *Surpassing the path-limited resolution of a Fourier transform spectrometer with frequency combs* *Phys. Rev. A* **93**, 021802(R) (2016).

Publication list of Anne L'Huillier

Selected publications most relevant to the project:

1. H. Laurell, S. Luo, R. Weissenbilder, M. Ammitzböll, H. Söderberg, S. Ahmed, C.L. Petersson, V. Poulain, C. Guo, C. Dittel, D. Finkelstein-Shapiro, R. J. Squibb, R. Feifel, M. Gisselbrecht, C. L. Arnold, A. Buchleitner, E. Lindroth, A. Frisk Kockum, **A. L'Huillier**, D. Busto, *Measuring the quantum state of photoelectrons* Nat. Phot. **19**, 352 (2025).
2. R. Weissenbilder, S. Carlström, L. Rego, C. Guo, C. M. Heyl, P. Smorenburg, E. Constant, C.L. Arnold, and **A. L'Huillier**, *How to optimize high-order harmonic generation in gases* Nat. Rev. Phys. **4**, 713 (2022).
3. J. Peschel, D. Busto, M. Plach, M. Bertolino, M. Hoflund, S. Maclot, J. Vinbladh, H. Wikmark, F. Zapata, E. Lindroth, M. Gisselbrecht, J. M. Dahlström, **A. L'Huillier**, and P. Eng-Johnsson, *Attosecond dynamics of multi-channel single photon ionization* Nat. Comm. **13**, 5205 (2022).
4. S. Mikaelsson, J. Vogelsang, C. Guo, I. Sytceвич, A.-L. Viotti, F. Langer, Y.-C. Cheng, S. Nandi, W. Jin, A. Olofsson, R. Weissenbilder, J. Mauritsson, **A. L'Huillier**, M. Gisselbrecht and C.L. Arnold, *A high-repetition rate attosecond light source for time-resolved coincidence spectroscopy* Nanophotonics **10**, 117 (2021).
5. S. Zhong, J. Vinbladh, D. Busto, R. J. Squibb, M. Isinger, L. Neorić, H. Laurell, R. Weissenbilder, C. L. Arnold, R. Feifel, J. M. Dahlström, G. Wendin, M. Gisselbrecht, E. Lindroth and **A. L'Huillier**, *Attosecond electron and spin dynamics in Xe 4d photoionization* Nat. Comm. **11**, 5042 (2020).
6. Y.-C. Cheng, S. Mikaelsson, S. Nandi, L. Rämisch, C. Guo, S. Carlström, A. Harth, J. Vogelsang, M. Miranda, C. L. Arnold, **A. L'Huillier**, M. Gisselbrecht, *Controlling photoionization using attosecond time-slit interferences* PNAS **117**, 10727 (2020).
7. S. Nandi, E. Plésiat, S. Zhong, A. Palacios, D. Busto, M. Isinger, L. Neorić, C.L. Arnold, R.J. Squibb, R. Feifel, P. Decleva, **A. L'Huillier**, F. Martín, M. Gisselbrecht, *Attosecond timing of electron emission from a molecular shape resonance* Sci. Adv. **6**, eaba7762 (2020).
8. H. Wikmark, C. Guo, J. Vogelsang, P.W. Smorenburg, H. Coudert-Alteirac, J. Lahl, J. Peschel, P. Rudawski, H. Dacasa, S. Carlström, S. Maclot, M. B. Gaarde, P. Johnsson, C. L. Arnold and **A. L'Huillier**, *Spatio-temporal coupling of attosecond pulses* PNAS **116**, 4779 (2019).
9. C. Cirelli, C. Marante, S. Heuser, C. L. M. Petersson, Á. Jiménez Galán, L. Argenti, S. Zhong, D. Busto, M. Isinger, S. Nandi, S. Maclot, L. Rading, P. Johnsson, M. Gisselbrecht, M. Lucchini, L. Gallmann, J. M. Dahlström, E. Lindroth, **A. L'Huillier**, F. Martín, U. Keller, *Anisotropic photoemission time delays close to a Fano resonance* Nat. Comm. **9**, 955 (2018).
10. M. Isinger, R.J. Squibb, D. Busto, S. Zhong, A. Harth, D. Kroon, S. Nandi, C.L. Arnold, M. Miranda, J.M. Dahlström, E. Lindroth, R. Feifel, M. Gisselbrecht and **A. L'Huillier**, *Photoionization in the time and frequency domain* Science **358**, 893 (2017).

Publication list of Mattias Marklund

Bibliometric information:

Since 2018, I have received 4963 overall citations, with an h-index of 35 over that period, which include 40 research papers.

Selected publications most relevant to the project:

1. A. Gonoskov, I. Gonoskov, C. Harvey, A. Ilderton, A. Kim, **M. Marklund**, G. Mourou, and A. Sergeev; *Probing nonperturbative QED with optimally focused laser pulses*, Phys. Rev. Lett. **111**, 060404 (2013).
2. A. Gonoskov, A. Bashinov, I. Gonoskov, C. Harvey, A. Ilderton, A. Kim, **M. Marklund**, G. Mourou and A. Sergeev, *Anomalous radiative trapping in laser fields of extreme intensity* Phys. Rev. Lett. **113**, 014801 (2014).
3. V. Dinu, T. Heinzl, A. Ilderton, **M. Marklund** and G. Torgrimsson, *Photon polarization in light-by-light scattering: Finite size effects* Phys. Rev. D **90**, 045025 (2014).
4. A. Gonoskov, S. Bastrakov, E. Efimenko, A. Ilderton, **M. Marklund**, I. Meyerov, A. Muraviev, A. Sergeev, I. Surmin, and E. Wallin, *Extended particle-in-cell schemes for physics in ultrastrong laser fields: Review and developments* Phys. Rev. E **92**, 023305 (2015).
5. V. Dinu, C. Harvey, A. Ilderton, **M. Marklund**, and G. Torgrimsson, *Quantum radiation reaction: from interference to incoherence* Phys. Rev. Lett. **116**, 044801 (2016).
6. J.M. Cole, K.T. Behm, E. Gerstmayr, T.G. Blackburn, J.C. Wood, C.D. Baird, M.J. Duff, C. Harvey, A. Ilderton, A.S. Joglekar, K. Krushelnick, S. Kuschel, **M. Marklund**, P. McKenna, C.D. Murphy, K. Poder, C.P. Ridgers, G.M. Samarin, G. Sarri, D.R. Symes, A.G.R. Thomas, J. Warwick, M. Zepf, Z. Najmudin, and S.P.D. Mangles, *Experimental evidence of radiation reaction in the collision of a high-intensity laser pulse with a laser-wakefield accelerated electron beam* Phys. Rev. X **8**, 011020 (2018).
7. R. Aboushelbaya, K. Glize, A.F. Savin, M. Mayr, B. Spiers, R. Wang, J. Collier, **M. Marklund**, R.M.G.M. Trines, R. Bingham, P.A. Norreys, *Orbital angular momentum coupling in elastic photon-photon scattering* Phys. Rev. Lett. **123**, 113604 (2019).
8. J. Magnusson, A. Gonoskov, **M. Marklund**, T.Zh. Esirkepov, J.K. Koga, K. Kondo, M. Kando, S.V. Bulanov, G. Korn, and S.S. Bulanov, *Laser-particle collider for multi-GeV photon production* Phys. Rev. Lett. **122**, 254810 (2019).
9. A. Gonoskov, T.G. Blackburn, **M. Marklund**, and S.S. Bulanov, *Charged particle motion and radiation in strong electromagnetic fields* Rev. Mod. Phys. **94**, 045001 (2022).
10. **M. Marklund**, T.G. Blackburn, A. Gonoskov, J. Magnusson, S.S. Bulanov, and A. Ilderton, *Towards critical and supercritical electromagnetic fields* High Power Laser Science and Engineering **11**, e19 (2023).

Publication list of Valdas Pasiskevicius

Selected publications most relevant to the project:

1. Ch. O. Krook, and **V. Pasiskevicius**, *Overcoming noise in pulse retrieval; Introducing the line search FROG algorithm*
Opt. Express **33**, 33258 (2025).
2. Y. Liu, and **V. Pasiskevicius**, *Generation of THz vector and scalar vortex beams by optical rectification along three-fold symmetry axis in Zinc-Blende crystals*
APL Photonics, **10**, 046101 (2025).
3. M. Brunzell, M. Widarsson, Ch. Krook, L. Barrett, A. Zukauskas, F. Laurell and **V. Pasiskevicius**, *Intra-Cavity Dark Pulse Generation through Synchronised Sum-Frequency Mixing*
Optics Lett., **47**, 1105 (2022).
4. P. Mutter, F. Laurell, **V. Pasiskevicius**, and A. Zukauskas, *Backward wave optical parametric oscillation in a waveguide*
NPJ Nanophotonics, **1**:38 (2024).
5. P. Mutter, A. Zukauskas, A.-L. Viotti, C. Canalias, and **V. Pasiskevicius**, *Phase-locked degenerate backward wave optical parametric oscillator*
APL Photonics, **8**, 026104 (2023). (editor's pick)
6. D. Zhai, E. Hérault, F. Garet, **V. Pasiskevicius**, F. Laurell, and J.-L. Coutaz, *Two-photon Enhanced Terahertz Generation from KTP Optically Pumped in the Visible-to-UV Range*
Opt. Express, **29**, 37683 (2021).
7. W.Tian, G. Cirmi, H. T. Olgun, C. Canalias, A. Zukauskas, L. Wang, E. Kueny, F. Ahr, A.-L. Calendron, F. Reichert, K. Hasse, Y. Hua, D. N. Schimpf, H. Çankaya, M. Pergament, M. Hemmer, N. Matlis, **V. Pasiskevicius**, F. Laurell, and F. X. Kärtner, *μ J-level multi-cycle terahertz generation in a periodically poled Rb:KTP crystal*
Opt. Lett., **46**, 741 (2021).
8. A.-L. Viotti, R. Lindberg, A. Zukauskas, R. Budriunas, D. Kucinskas, T. Stanislauskas, F. Laurell, and **V. Pasiskevicius**, *Mid-infrared octave-spanning supercontinuum generation and cascaded soliton self-compression in $\chi^{(2)}$ -modulated KTiOPO₄*
Optica, **5**, 711 (2018).
9. G. Strömqvist, **V. Pasiskevicius**, C. Canalias, and C. Montes, *Coherent phase modulation transfer in counter-propagating parametric down-conversion*
Phys. Rev. A, **84**, 023825 (2011).
10. C. Canalias, and **V. Pasiskevicius**, *Mirrorless optical parametric oscillator*
Nature Photonics, **1**, 459-462 (2007).

Publication list of Laszlo Veisz

Bibliometric information:

6472 Citations, h-index 42, i-10 index 74 (Source: Google Scholar),
4054 Citations, h-index 35 (Source: Web of Science).

Selected publications most relevant to the project:

1. **L. Veisz**, P. Fischer, S. Vardast, F. Schnur, A. Muschet, A. De Andres, S. Kaniyeri, H. Li, R. Salh, K. Ferencz, G. Norbert Nagy, and S. Kahaly, *Waveform-controlled field synthesis of sub-two-cycle pulses at the 100 TW peak power level* *Nat. Photon.* (2025). <https://doi.org/10.1038/s41566-025-01720-2>
2. J. Björklund Svensson, D. Guénot, J. Ferri, H. Ekerfelt, I. Gallardo González, A. Persson, K. Svendsen, **L. Veisz**, and O. Lundh, *Low-divergence femtosecond X-ray pulses from a passive plasma lens* *Nat. Phys.* **17**, 639 (2021).
3. J. Wenz, A. Döpp, K. Khrennikov, S. Schindler, M. F. Gilljohann, H. Ding, J. Götzfried, A. Buck, J. Xu, M. Heigoldt, W. Helml, **L. Veisz**, and S. Karsch, *Dual-energy electron beams from a compact laser-driven accelerator* *Nat. Photon.* **13**, 263 (2019).
4. D. E. Rivas, B. Major, M. Weidman, W. Helml, G. Marcus, R. Kienberger, D. Charalambidis, P. Tzallas, E. Balogh, K. Kovács, V. Tosa, B. Bergues, K. Varjú, and **L. Veisz**, *Propagation-enhanced generation of intense high-harmonic continua in the 100-eV spectral region* *Optica* **5**, 1283 (2018).
5. B. Bergues, D. E. Rivas, M. Weidman, A. A. Muschet, W. Helml, A. Guggenmos, V. Pervak, U. Kleineberg, G. Marcus, R. Kienberger, D. Charalambidis, P. Tzallas, H. Schröder, F. Krausz, and **L. Veisz**, *Tabletop nonlinear optics in the 100-eV spectral region* *Optica* **5**, 237 (2018).
6. D. Kormin, A. Borot, G. Ma, W. Dallari, B. Bergues, M. Aladi, I. B. Földes, and **L. Veisz**, *Spectral interferometry with waveform-dependent relativistic high-order harmonics from plasma surfaces* *Nat. Commun.* **9**, 4992 (2018).
7. D. E. Rivas, A. Borot, D. E. Cardenas, G. Marcus, X. Gu, D. Herrmann, J. Xu, J. Tan, D. Kormin, G. Ma, W. Dallari, G. D. Tsakiris, I. B. Földes, S.-W. Chou, M. Weidman, B. Bergues, T. Wittmann, H. Schröder, P. Tzallas, D. Charalambidis, O. Raszkazovskaya, V. Pervak, F. Krausz, and **L. Veisz**, *Next generation driver for attosecond and laser-plasma physics* *Sci. Rep.* **7**, 5224 (2017).
8. A. Buck, M. Nicolai, K. Schmid, C. M. S. Sears, A. Sävert, J. M. Mikhailova, F. Krausz, M. C. Kaluza, **L. Veisz**, *Real-time observation of laser-driven electron acceleration* *Nat. Phys.* **7**, 543 (2011).
9. D. Herrmann, **L. Veisz**, R. Tautz, F. Tavella, K. Schmid, V. Pervak, and F. Krausz, *Generation of sub-three-cycle, 16 TW light pulses by using noncollinear OPCPA* *Opt. Lett.* **34**, 2459 (2009).
10. Y. Nomura, R. Hörlein, P. Tzallas, B. Dromey, S. Rykovanov, Zs. Major, J. Osterhoff, S. Karsch, **L. Veisz**, M. Zepf, D. Charalambidis, F. Krausz, and G. D. Tsakiris, *Attosecond phase locking of harmonics emitted from laser-produced plasmas* *Nat. Phys.* **5**, 124 (2009).

Motivering av sökt budget

Motivering av sökt budget (engelska)

Costs associated with the arrangements of workshops for up to 200 people contributing to the planning work of this cluster, where we assume about 600 SEK/person (for coffee breaks, lunch and dinner) for about 4,5 conference days (distributed over the grant period of 6 months), are estimated to amount to 550 000 SEK.

Travel and accommodation costs for invited speakers to the planned workshops are estimated to amount to 200 000 SEK.

Salary costs for the coordination work and for writing the 20 A4 page final report of the main applicant (15 % of full time equivalent) and a supporting administrator (5 % of full time equivalent) throughout the grant period of 6 months are estimated to amount to 150 000 SEK.

Taking into account costs for premisses (ca. 35 000 SEK) and overhead costs of the administrating organisation (ca. 265 000 SEK), this sums up to the total amount of 1 200 000 SEK applied for.

CV

CV - Raimund Feifel

Projektleader: Raimund Feifel
Födelsedatum: 19700724
Kön: Man
Land: Sverige

Dr-examen: 2003-05-14
Akademisk titel: Professor
Arbetsgivare: Göteborgs universitet

Doktorsexamen			
Examen	Organisation	Avhandlingens titel (originalspråk)	Handledare
10302. Atom- och molekylfysik och optik, 2003-05-14	Uppsala universitet, Inst för fysik och astronomi	Resonant and Non-Resonant Electron Spectroscopy of Free Molecules and Free Clusters	Svante Svensson

Utbildning

Forskarutbildning			
Examen	Organisation	Avhandlingens titel	Namn på handledare
Doktorsexamen, 10302. Atom- och molekylfysik och optik, 2003-05-14	Uppsala universitet, Sverige, Inst för fysik och astronomi	Resonant and Non-Resonant Electron Spectroscopy of Free Molecules and Free Clusters	Svante Svensson

Utbildning på grund- och avancerad nivå	
År	Examen
1998	10302. Atom- och molekylfysik och optik, Diploma of Physics, Universität Konstanz, Tyskland

Arbetsliv

Anställningar				
Period	Anställning	Del av forskning i anställningen (%)	Arbetsgivare	Övrig information
december 2013 - Nuvarande	Professor, Tillsvidareanställning	70	Göteborgs universitet, Sverige, Fysik, inst för	
augusti 2011 - mars 2014	Professor, Tillsvidareanställning	75	Uppsala universitet, Sverige, Inst för fysik och astronomi	
december 2010 - juli 2011	Lektor, Tillsvidareanställning	75	Uppsala universitet, Sverige, Inst för fysik och astronomi	
januari 2010 - december 2010	Forskare, Tillsvidareanställning	85	Uppsala universitet, Sverige, Inst för fysik och astronomi	
januari 2006 - december 2009	Forskarassistent, Tidsbegränsad anställning	80	Uppsala universitet, Sverige, Inst för fysik och astronomi	
augusti 2003 - juli 2005	Lärare för grundutbildningss studenter, Tillsvidareanställning	90	University of Oxford, Storbritannien och Nordirland, Worcester College	Min forskningstid finanserades med ett postdoktorstipendium av Vetenskapsrådet.
september 1998 - juni 2003	Doktorand, Tidsbegränsad anställning	80	Uppsala universitet, Sverige, Inst för fysik och astronomi	

Postdoktorvistelser		
Period	Organisation	Ämne
augusti 2005 - december 2005	Uppsala universitet, Sverige, Inst för fysik och astronomi	10302. Atom- och molekyelfysik och optik
augusti 2003 - juli 2005	University of Oxford, Storbritannien och Nordirland, Department of Chemistry	10402. Fysikalisk kemi

Forskarutbyten			
Period	Typ	Organisation	Ämne
maj 2023 - juni 2023	Gästprofessor	Universidad Nacional Autonoma de Mexico, Mexiko, Instituto de Quimica	10302. Atom- och molekyelfysik och optik
januari 2009 - februari 2009	Gästforskare	SPRING-8, Hyogo, Japan, SCSS Free Electron Laser (FEL) facility	10302. Atom- och molekyelfysik och optik
juni 2006 - augusti 2006	Gästforskare	Tohoku University, Japan, Institute of Multidisciplinary Research for Advanced Materials	10302. Atom- och molekyelfysik och optik

Uppehåll i forskningen	
Period	Beskrivning
2017-08-14 - 2018-05-31	Cirka 67 dagar föräldraledighet.

Meriter och utmärkelser

Docentur		
År	Ämne	Organisation
2007	103. Fysik	Uppsala universitet, Sverige, Inst för fysik och astronomi

Handledda personer				
År	Handledda personer	Lärosäte (handledd person)	Roll	Antal
	Student	Göteborgs universitet, Sverige	Huvudhandledare	27
	Student	Uppsala universitet, Sverige, 113 Inst för fysik och astronomi	Huvudhandledare	17
	Student	Chalmers tekniska högskola, Sverige	Huvudhandledare	8
	Student	Stockholms universitet, Sverige, Fysikum	Huvudhandledare	2
2025	Doktorand, Emelie Olsson	Göteborgs universitet, Sverige	Huvudhandledare	
2024	Doktorand, Måns Wallner	Göteborgs universitet, Sverige, Fysik, inst för	Huvudhandledare	
2019	Doktorand, Andreas Hult Roos	Göteborgs universitet, Sverige	Huvudhandledare	
2019	Doktorand, Dimitris Koulentianos	Göteborgs universitet, Sverige	Huvudhandledare	
2019	Doktorand, Jonas Andersson	Göteborgs universitet, Sverige	Huvudhandledare	
2016	Doktorand, Sergey Zagorodskikh	Uppsala universitet, Sverige	Huvudhandledare	
2014	Doktorand, Lage Hedin	Uppsala universitet, Sverige	Huvudhandledare	
2013	Doktorand, Per Linusson	Stockholms universitet, Sverige	Huvudhandledare	
2010	Doktorand, Egil Andersson	Uppsala universitet, Sverige	Huvudhandledare	
2024	Doktorand, Marco Parriani	University of Perugia, Italien	Bihandledare	
2022	Postdok, Alexander Hinterberger	Göteborgs universitet, Sverige, Fysik, inst för	Huvudhandledare	
2022	Postdok, Hélène Coudert-Alteirac	Göteborgs universitet, Sverige, Fysik, inst för	Huvudhandledare	
2017	Postdok, Richard Squibb	Göteborgs universitet, Sverige	Huvudhandledare	
2016	Postdok, Raj Singh	Göteborgs universitet, Sverige	Huvudhandledare	
2015	Postdok, Craig Slater	University of Oxford, Storbritannien och Nordirland	Huvudhandledare	
2013	Postdok, Melanie Mucke	Uppsala universitet, Sverige	Huvudhandledare	

Bidrag erhållna i konkurrens				
Period	Finansiär	Projektledare	Din roll	Totalt belopp (kr)
2025 - 2030	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Raimund Feifel	Projektledare	34 000 000

Period	Finansiär	Projektledare	Din roll	Totalt belopp (kr)
2024 - 2027	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Raimund Feifel	Projektledare	3 935 000
2019 - 2022	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Raimund Feifel	Projektledare	3 456 000
2018 - 2023	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Raimund Feifel	Projektledare	36 300 000
2017 - 2021	Sverige - Övriga privata utförare,	Raimund Feifel	Projektledare	5 000 000
2013 - 2016	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Raimund Feifel	Projektledare	3 300 000
2011 - 2016	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Raimund Feifel	Projektledare	7 614 000
2010 - 2012	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Raimund Feifel	Projektledare	2 130 000
2007 - 2010	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Raimund Feifel	Projektledare	6 000 000
2006 - 2009	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Raimund Feifel	Projektledare	3 642 000

Priser och utmärkelser				
År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2010	Sverige	Senior Research Fellowship from the Swedish Research Council (VR)	Swedish Research Council/Vetenskapsrådet	
2006	Sverige	Göran Gustafsson Price for "Young Researchers" 200 kSEK	Göran Gustafsson Stiftelse (KTH/UU)	
2005	Sverige	Junior Research Fellowship from the Swedish Research Council (VR)	Swedish Research Council/Vetenskapsrådet	
2003	Sverige	Postdoctoral Research Fellowship from the Swedish Research Council (VR)	Swedish Research Council/Vetenskapsrådet	
1997	Tyskland	Student Scholarship from Dr. Carl Duisberg Foundation	Dr. Carl Duisberg Foundation, Leverkusen	
1997	Sverige	Student Scholarship from the Swedish Institute (SI) and Deutscher Akademischer Austauschdienst (DAAD)	Swedish Institute (SI), Stockholm and Deutscher Akademischer Austauschdienst (DAAD), Bonn	
1995	Tyskland	Erasmus Student Scholarship	Universität Konstanz	

Andra meriter		
Period	Typ av merit	Beskrivning

Period	Typ av merit	Beskrivning
2010 - 2025	Commissions of trust within the university	2010 - 2012: Board member at the Department of Physics and Astronomy, Uppsala University. 2014 - 2015: Member of the research advisory committee at the Faculty of Science, University of Gothenburg. 2014 - 2018: Member of the research advisory committee at the Department of Physics, University of Gothenburg; during the academic year 2014 - 2015, I acted as the chairman of this committee. 2015 - 2016: Member of the management group at the Department of Physics, University of Gothenburg. 2015 - 2024: Board member at the Faculty of Science, University of Gothenburg. 2019 - 2021: Member of a working group for improving the gender balance at the Faculty of Science, University of Gothenburg. Since 2021: Equal opportunity representative at the Department of Physics, University of Gothenburg.
2011 - 2025	International grant and beam time proposal reviewer	April 2011: Swedish Research Council. May 2013: Max Planck Society, Munich. October 2014: Estonian Research Council. March 2016: Swiss National Science Foundation. April 2016: French National Research Agency. May 2017: German Research Foundation (DFG). February 2018: Labex MiChem laboratory cluster, Sorbonne Université, Paris. January 2019: Irish Research Council. April 2020: European Research Council (ERC). May 2020: DFG, Germany. June 2020: Adlerbertska Foundations, University of Gothenburg. June 2020: Sorbonne Université, Paris. December 2020: Irish Research Council. December 2021: Irish Research Council. March 2022: DFG, Germany. January 2023: Irish Research Council. October 2023: PETRA-III, DESY, Germany. January 2024: Irish Research Council. March 2024: National Science Centre (NCN), Poland. April 2024: PETRA-III, DESY, Germany. September 2024: NCN, Poland. March 2025: DFG, Germany. April 2025: PETRA-III, DESY, Germany. July 2025: ERC.
2003 - 2025	Invited oral presentations	About 100 invited talks at international conferences, workshops, summer schools and research institutes. A representative selection: 1. International Conference on Electronic Structure and Spectroscopy, Berkeley, July 2025. 2. SPIE Optics and Optoelectronics Symposium, Prague April 2025. 3. Int. Meeting on Atomic and Molecular Physics and Chemistry, Warsaw, July 2024. 4. Soft X-ray Science at PETRA workshop, DESY, Hamburg, November 2023. 5. International Conference on Electronic Structure and Spectroscopy, Oulu, August 2023. 6. Colloquium at the Physical Science Institute, Universidad Nacional Autónoma de México, Cuernavaca, June 2023. 7. COST Action DEEP-GAS conference, Madrid, October 2022. 8. Extreme Light Infrastructure (ELI) user conference, Prague, October 2021. 9. Webinar, PETRA-IV workshop, DESY, Hamburg, November 2020. 10. IRTG seminar, Institute for Physics, University of Freiburg, January 2019.
2008 - 2025	Leadership training	In 2008 I attended a leadership training entitled "Att vara chef och ledare" organised by the Leadership and Organizational Development Office of Uppsala University. In 2015 I attended a leadership training entitled "Konflikthantering" organised by the Office for Skills Development of the University of Gothenburg. In 2015 I attended a leadership training entitled "Ekonomispelet" organised by the Office for Skills Development of the University of Gothenburg. In 2021 I attended a leadership training entitled "Likabehandling och diskriminering" organised by the Office for Skills Development of the University of Gothenburg. In 2023 I attended a leadership training on "How to talk to the media" organised by the Faculty of Science, University of Gothenburg. In 2025 I attended a leadership training on "Nyfiken på ledarskap" organised by the Office for Skills Development of the University of Gothenburg.

Period	Typ av merit	Beskrivning
2004 - 2025	Peer reviewer for scientific journals	Since 2004, I frequently review scientific manuscripts for Nature; Physical Review Letters and Physical Review A; Journal of Chemical Physics; Chemical Physics Letters and Chemical Physics; Journal of Electron Spectroscopy and Related Phenomena; Molecular Physics; Acta Physica Polonica A; Journal of Physics B: Atomic, Molecular and Optical Physics; International Journal of Mass Spectrometry; Applied Physics A; etc.
2014 - 2025	Internal examiner of PhD students	Internal examiner of PhD students at the Department of Physics, University of Gothenburg: Afshin Houshang (2014 - 2017). Mohammad Zahedinejad (2015 - 2019). Annie Ringvall Moberg (2016 - 2023). Yu-Wei Chang (2020 -). Jesus Pineda Castro (2020 -). Martin Selin (2020 -). Pablo Emiliano Gomez Ruiz (2020 -). Sesha Sai Harshith Bachimanchi (2020 - 2025). Daniela Perez Guerro (2021 -). Jesus Manuel Antunez Dominguez (2021 - 2024). Victor Gonzalez Sanchez (2021 - 2025). Dana Hassan (2021 -). Fredrik Skärberg (2021 -). Linde Viaene (2024 -). Anqi Lyu (2025 -). Chinmay Hemant Khanolkar (2025 -).
2017 - 2025	Host of guest researchers and guest research students	November 2017: host of guest researcher Dr. Jan Metje from the University of Potsdam. January 2019 - June 2019: host of guest researcher Dr. Olena Kulyk from the Extreme Light Infrastructure facility ELI Beamlines in Prague. August 2019 - December 2023: host of guest researcher Dr. Andreas Hult Roos from ELI Beamlines in Prague. October 2020 - December 2020: host of guest PhD student Mahmoud Jarraya, University of Tunis El Manar. October 2020 - December 2020: host of guest PhD student Laamiri Khoulood, University of Tunis El Manar. November 2022 - October 2023: host of guest PhD student Marco Parriani, University of Perugia. March 2025 - October 2025: host of guest PhD student Antoine Gloriod, Université Gustave Eiffel.
2005 - 2025	Editorial board member	2005 - further: Member of the editorial board of the International Journal of Materials Science (IJoMS), Research India Publications. 2011 - 2014: Member of the editorial board of the journal "International Scholarly Research Notices - Spectroscopy", Hindawi Publishing Corporation (now "International Scholarly Research Notices", Hindawi Publishing Corporation). 2021 - 2022: Guest Editor of Physical Chemistry Chemical Physics (PCCP) for the Festschrift "Ions, electrons, coincidences and dynamics" for John H.D. Eland.
2000 - 2025	Teaching activities	Since my time as a PhD student, I teach frequently on the amount of 10 - 30 % of my full time employment, covering courses at the university entrance level (Swedish basår), undergraduate level and graduate (master and PhD) level. Here is a representative selection of my teaching activities: 2000 – 2002 Assistant for practical course laboratory exercises in Atomic and Molecular Physics, and in Quantum Physics, Uppsala University, Sweden. 2003 – 2005 Class Tutor in Mathematics and Physics, Worcester College, Oxford University, UK. 2006 – 2013 Lecturer in Atomic and Molecular Physics, Department of Physics and Astronomy, Uppsala University, Sweden. 2014 – further Lecturer in Atomic and Molecular Physics, and in Waves, Optics & Modern Physics, Department of Physics, University of Gothenburg, Sweden.

Period	Typ av merit	Beskrivning
2010 - 2025	Conference organisation	In 2010 I organised the symposium "Trends in Experimental Physics: Multi-Particle Coincidence Spectroscopy of Atoms and Molecules" which received funding from the Göran Gustafsson Foundation (UU/KTH) and from the Swedish Royal Academy of Science (KVA). This symposium attracted a fairly large number of participants from Sweden and abroad (> 40 people). In 2013/2014 I was member of the organisation committee of MOLEC 2014 (chair Prof. Gunnar Nyman, Department of Chemistry, University of Gothenburg), an international conference series of high reputation which typically attracts around 100 people. In 2016/2017 I was member of the Scientific Advisory Committee for a topical workshop on AMO and cluster research (chair Prof. Stacey Sörensen) held in March 2017 at the MAX IV laboratory in Lund, which was attended by > 50 people. In 2024/2025 I was member of the local organisation committee for the ATTO-X conference (chair Per Eng-Johnsson) held in Lund in July 2025, which was attended by 450 people.
2008 - 2024	Member of PhD thesis committees	June 2008: Oksana Travnikova, Uppsala University. October 2008: Robert Saers, Umeå University. September 2009: Markus Suhonen, Stockholm University. May 2011: Anders Solder, Stockholm University. June 2011: Marcus Dahlström, Lund University. March 2012: Andrius Jurgilaitis, Lund University. March 2012: Joakim Laksman, Lund University. June 2012: Sultan Mahmood, Stockholm University. September 2014: Diego Guénot, Lund University. April 2016: Christian Stråhlman, Lund University. November 2016: Emil Ryberg, Chalmers University of Technology. June 2018: Nina Ignatova, Royal Institute of Technology. March 2020: Ali Hosseinnia, Lund University. September 2020: Fredrik Johansson, Uppsala University. June 2021: Viktoriia Savchenko, Royal Institute of Technology. October 2021: Alexander Permogorov, Lund University. October 2022: Peter Fischer, Umeå University. September 2024: Christopher Warren, Chalmers University of Technology.
2024 - 2024	Electoral assembly for the Swedish Research Council	Member of the electoral assembly for the Council for Natural and Engineering Sciences and the Board of the Swedish Research Council.
2006 - 2023	Guest professor/guest researcher/visiting scientist	2006 Visting scientist in Prof. Kiyoshi Ueda's group at the Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University, Sendai, Japan. 2006 – 2014 Guest researcher in Prof. Mats Larsson's group at Stockholm University, Department of Physics, Alba Nova University Center, Sweden. 2023 Guest professor at Universidad Nacional Autónoma de México, Institute of Chemistry, Mexico City, in Dr. Daniel Finkelstein-Shapiro's group, and at Universidad Nacional Autónoma de México, Institute of Physical Science, Cuernavaca in Prof. Remigio Carbrera Trujilo's group, Mexico.
2013 - 2021	Opponent for/external examiner of PhD theses	October 2013: Antti-Jussi Kettunen, Oulu University (external examiner). August 2015: Lasse Harbo, Aarhus University (opponent). November 2021: Artur Born, University of Potsdam (external examiner).
2007 - 2021	Host of visiting and guest professors	During 2007 - 2009, I was the host of visiting professor John H.D. Eland from Oxford University. During 2009 - 2010, I was the host of visting professor Sergey Sheinerman from St. Petersburg State Maritime Technical University. During 2010 - 2013, Prof. Eland was formally appointed guest professor at Uppsala University, associated with my research environment. During 2015 - 2018 Prof. Eland was formally appointed guest professor at the University of Gothenburg, associated with my research environment. During 2020 - 2021 Prof. Majdi Hochlaf held the Waernska guest professorship of the University of Gothenburg, associated with my and Prof. Gunnar Nyman's research environments.

Period	Typ av merit	Beskrivning
2007 - 2019	Board member of the Atomic, Molecular and Optical Physics section of the Swedish Physical Society	The Atomic, Molecular and Optical Physics section of the Swedish Physical Society organises frequently scientific meetings for a broad audience who is interested in atomic, molecular and optical physics.
2010 - 2017	Chairman and board member of the users' association FASM at the MAX-IV laboratory, Lund	The users' association FASM at the MAX-IV laboratory in Lund is the organ which represents all users of the laboratory towards the management of this laboratory. During 2010 - 2017 I served on the board of this users' association, and during 2013 - 2017 I acted as its chairman.
2014 - 2017	Host of assistant professors	During 2014 - 2017, Dr. Vitali Zhaunerchyk was assistant professor (biträdande lektor) associated with my research environment, where he set up his own research activities. In October 2017 he got tenured as senior lecturer (universitetslektor) at the University of Gothenburg, Department of Physics, where he now runs his independent research group.
2007 - 2013	Secretary of the Swedish Physical Society and the National Committee for Physics, Sweden	The Secretary of the Swedish Physical Society and the National Committee for Physics, Sweden (two organisations which in practice coincide with each other) was up to the end of 2013 in charge of all kinds of practical matters which the two organisations had to deal with on a daily basis. Since January 2014, many of these practical tasks are handled by the administration office of the Swedish Chemical Society.
2012 - 2013	Mentor	Mentor for Dr. Ida-Maria Sintorn, Department of Information Technology, Uppsala University, within the framework of a career development program for tenure-track female junior scientists organised by the Faculty of Science and Technology at Uppsala University. Dr. Ida-Maria Sintorn is now full professor at the Department of Information Technology, Uppsala University.

CV - Cord Arnold

Medverkande forskare: Cord Arnold
Födelsedatum: 19771212
Kön: Man
Land: Sverige

Dr-examen: 2007-12-11
Akademisk titel: Docent
Arbetsgivare: Lunds universitet

Utbildning

Forskarutbildning			
Examen	Organisation	Avhandlingens titel	Namn på handledare
Doktorsexamen, 10302. Atom- och molekylfysik och optik, 2007-12-11	Leibniz Universität Hannover, Tyskland	Erzeugung optischer Durchbrüche bei hoher numerischer Apertur: Numerische Simulationen zur Submikrometer-Manipulation transparenter Materialien und biologischer Zellen mit ultrakurzen Laserpulsen	Wolfgang Ertmer

Utbildning på grund- och avancerad nivå

År **Examen**

2003 103. Fysik, Högskoleexamen, Leibniz Universität Hannover, Tyskland

Arbetsliv

Anställningar			
Period	Anställning	Del av forskning i anställningen (%)	Arbetsgivare
april 2015 - Nuvarande	Lektor, Tillsviareanställning	50	Lunds universitet
juni 2011 - mars 2015	Forskarassistent	80	Lunds universitet

Postdoktorvistelser		
Period	Organisation	Ämne
mars 2010 - maj 2011	Lunds universitet, Sverige	10302. Atom- och molekyelfysik och optik
september 2008 - februari 2010	Laboratoire d'Optique Appliquée, Frankrike, Laser-Matter Interaction	10302. Atom- och molekyelfysik och optik
december 2007 - augusti 2008	Laser Zentrum Hannover, Tyskland, Biomedical Optics	10302. Atom- och molekyelfysik och optik

Uppehåll i forskningen	
Period	Beskrivning
2015-09-01 - 2016-03-11	I was on 50% parental leave from 2015-09-01 to 2016-03-11, corresponding to a total of 61 work days, for Philip Louis Arnold, born 01-08-2015.

Meriter och utmärkelser

Docentur		
År	Ämne	Organisation
2015	103. Fysik	Lunds universitet, Sverige, Fysiska institutionen 107131

Handledda personer			
År	Handledda personer	Lärosäte (handledd person)	Roll
2028	Doktorand, Edoardo A. Boati	Lunds universitet, Sverige	Huvudhandledare
2027	Doktorand, Caroline Juliano	Lunds universitet, Sverige, Fysiska institutionen 107131	Huvudhandledare
2027	Doktorand, Melvin Redon	Lunds universitet, Sverige	Huvudhandledare
2026	Doktorand, Daniel Diaz Rivas	Lunds universitet, Sverige, Fysiska institutionen 107131	Huvudhandledare
2022	Doktorand, Ivan Sytcevic	Lunds universitet, Sverige, Fysiska institutionen 107131	Huvudhandledare
2022	Doktorand, Lana Neoricic	Lunds universitet, Sverige, Fysiska institutionen 107131	Huvudhandledare
2021	Doktorand, Sara Mikalesson	Lunds universitet, Sverige, Fysiska institutionen 107131	Huvudhandledare
2028	Doktorand, Gaspard Beaufort	Lunds universitet, Sverige	Bihandledare
2027	Doktorand, Saga Westerberg	Lunds universitet, Sverige	Bihandledare
2026	Doktorand, Nedjm Ouahuoune	Lunds universitet, Sverige	Bihandledare
2024	Doktorand, Ann-Kathrin Raab	Lunds universitet, Sverige, Fysiska institutionen 107131	Bihandledare
2024	Doktorand, Arthur Schoenberg	DESY - Deutsches Elektronen-Synchrotron, Tyskland	Bihandledare
2017	Doktorand, Chen Guo	Lunds universitet, Sverige	Bihandledare

År	Handledda personer	Lärosäte (handledd person)	Roll
2014	Doktorand, Diego Guenot	Lunds universitet, Sverige	Bihandledare
2012	Doktorand, Miguel Miranda	Lunds universitet, Sverige	Bihandledare
2026	Postdok, Miguel Canhota	Lunds universitet, Sverige	Huvudhandledare
2026	Postdok, Yuman Fang	Lunds universitet, Sverige, Fysiska institutionen 107131	Huvudhandledare
2022	Postdok, Anne-Lise Viotti	Lunds universitet, Sverige, Fysiska institutionen 107131	Huvudhandledare
2017	Postdok, Anne Harth	Lunds universitet, Sverige	Huvudhandledare
2015	Postdok, Miguel Miranda	Lunds universitet, Sverige	Huvudhandledare

Bidrag erhållna i konkurrens					
Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2025 - 2030	Europeiska Unionen (EU),	Sophi Kazamias	Medverkande	0	46 000 000
2023 - 2028	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Mathieu Gisselbrecht	Medverkande	5 000 000	26 000 000
2022 - 2025	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Cord Arnold	Projektledare	0	3 390 000
2022 - 2025	Europeiska Unionen (EU),	Cord Arnold	Projektledare	0	21 000 000
2022 - 2023	Crafoord Stiftelsen, Sverige - Annan forskningsfinansiär	Cord Arnold	Projektledare	0	300 000
2021 - 2026	Europeiska Unionen (EU),	Sophi Kazamias	Medverkande	0	42 000 000
2020 - 2024	LU infrastructure, Sverige - Universitet och högskolor	Per Johnsson	Medverkande	0	10 000 000
2019 - 2023	LTH Infrastructure support, Sverige - Universitet och högskolor	Cord Arnold	Projektledare	0	1 400 000
2017 - 2020	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Cord Arnold	Projektledare	0	3 200 000
2013 - 2016	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Cord Arnold	Projektledare	0	2 800 000

Priser och utmärkelser				
År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning

År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2008	Tyskland	Postdoc grant 45k€	Nationale Akademie der Wissenschaften - Leopoldina	I obtained a prestigious postdoc grant from Nationale Akademie der Wissenschaften – Leopoldina (45k€) to spend 18 month at Laboratoire d’Optique Appliquée (Paris France).
2007	Tyskland	Best dissertation 2007	Laser Zentrum Hannover	I was awarded 1000€ for the best dissertation being performed at the Laser Zentrum Hannover in the year 2007.

Andra meriter		
Period	Typ av merit	Beskrivning
2023 - 2125	Board member of the Swedish National Committee for Optics	Since 2023, I am member of the board (styrelse) of the Swedish National Committee for Optics. The different committees are organized by the Royal Swedish Academy of Sciences.
2019 - 2120	Organizer of the weekly scientific seminar at the Department of Physics	I am the main organizer of the weekly scientific seminar at the Department of Physics.
2014 - 2119	Entrepreneur	Founding partner of Sphere Ultrafast Photonics. Sphere Ultrafast Photonics was established in 2013 with founding partners from Portugal, Spain, France, Finland and Sweden to deliver cutting-edge laser equipment to academia and industry (http://www.sphere-photonics.com/).
2007 - 2030	Reviewer for peer-reviewed research journals	I am regular reviewer for the following journals: Science, Nature Photonics, Optica, Optics Letters, Optics Express, Nature Scientific Reviews, New Journal of Physics, Journal of the Optical Society of America B, Journal of Physics B, Optics Communications, Journal of Biomedical Optics, Applied Physics B, European Physics Letters, European Physical Journal D, Journal of Modern Optics, Applied Sciences.
2019 - 2030	Reviewer for international funding organizations	I regularly review projects for the European Research Council, Swiss National Science Foundation, National Research Foundation (USA), Czech Science Foundation (GACR) and Deutsche Forschungsgemeinschaft (DFG), Israel Science Foundation, Leibniz Foundation.
2021 - 2030	Director of the Erasmus Mundus Master program LASCALA - Large Scale Accelerators and Lasers	In 2020, teachers from Université Paris-Saclay, Sapienza Università di Roma, University of Szeged and Lund University applied for Erasmus Mundus funding to form a new international master program, LASCALA, dedicated to educating talented students in the science and abilities needed to efficiently use large scale European physics infrastructures, like accelerators, synchrotrons, free-electron lasers and large laser installations. The proposal has been granted by the European Union (4.2M€) and the first cohort of students will start the program in autumn 2021. I am the local director of the program at Lund University.
2024 - 2029	Editor	Since the end of 2024, I am deputy editor of the journal Optica. Optica is the highest ranked journal in optics that is organized by the research community, i.e. without professional editors.
2019 - 2028	Head of the International Master's in Photonics	I am heading the International Master's of Photonics, a 120ECTS master's program for students interested in advanced photonics, like lasers, integrated optics, optical communication and medical applications.

Period	Typ av merit	Beskrivning
2021 - 2026	Member of the board of the Lund Laser Centre (LLC).	Since 2021, I am member of the board (styrelse) of the Lund Laser Centre (LLC).
2023 - 2025	Co-organizer of the 10th Conference in Attosecond Physics and Technology	I am one of the organizers of the 10th conference in "Attosecond Science and Technology" to be held in Lund, Sweden, in summer 2025.
2021 - 2025	Member of the Board of the Department of Physics	Since 2021, I am member of the board (styrelse) of the Department of Physics.
2023 - 2025	Programme chair for the 14th Ultrafast Optics conference	I am program chair for the 14th Ultrafast Optics conference, to be held in Furnas, Portugal (Azores), October 5-10, 2025.
2020 - 2023	Organizing committee member for Ultrafast Optics Conference 2023.	I am part of the organizing committee and in charge of the part of the conference about attosecond sources. Because of Corona the conference was moved and finally happened in March 2023 in Bariloche, Argentina.
2022 - 2023	Co-organizer of the Nobel Symposium in Attosecond Science and Technology	I am co-organizer of the Nobel Symposium in "Attosecond Science and Technology", funded by The Royal Swedish Academy of Sciences and held in Båstad, Sweden, August 20-23, 2023.
2018 - 2020	European Commission project monitor	I monitor a FetOpen project (Laser-Lightning-Rod) for the European Commission. This includes annual evaluations of the project progress and suggestions for changes, if things depart too much from the anticipated plan.
2018 - 2018	Co-organizer of the 2018 Siegman International Summer School on Lasers	The Siegman international School on Lasers is the most prestigious in the annual calendar of the Optical Society of America. In 2018, we organized it on the island Ven, located between Denmark and Sweden in the Öresund. The other organizers were Peter Andersen (DTU), Stefan Andersson-Engels (Tyndall National Institute, Ireland), Kishan Dholakia (St. Andrews University, Scotland) and Jon Zuegel (University of Rochester, US).

Immaterialrätt

Immaterialrätt					
Typ	Datum för beviljning	Status	ID	Licensierad till annan	Produkt klassificering
Patent	2024-10-16	Beviljad	EP4446712A1	Ej Sverige - Företag	26. Datorer, elektronikvaror och optik
Patent	2021-01-27	Beviljad	WO2022017687 A1	Ej Sverige - Företag	26. Datorer, elektronikvaror och optik
Patent	2013-04-18	Beviljad	20111000077909	Ej Sverige - Företag	26. Datorer, elektronikvaror och optik
Patent	2010-06-10	Beviljad	WO/2010/063730	Nej	26. Datorer, elektronikvaror och optik
Patent		Beviljad	20171000055803	Ej Sverige - Företag	26. Datorer, elektronikvaror och optik

CV - Aleksandra Foltynowicz Matyba

Medverkande forskare: Aleksandra Foltynowicz Matyba **Dr-examen:** 2009-06-15
Födelsedatum: 19810329 **Akademisk titel:** Doktor
Kön: Kvinna **Arbetsgivare:** Umeå universitet
Land: Sverige

Utbildning

Forskarutbildning			
Examen	Organisation	Avhandlingens titel	Namn på handledare
Doktorsexamen, 10302. Atom- och molekylfysik och optik, 2009-06-15	Umeå universitet, Sverige, Institutionen för fysik+	Fiber-laser-based noise-immune cavity-enhanced optical heterodyne molecular spectrometry	Ove Axner

Utbildning på grund- och avancerad nivå

År	Examen
2005	103. Fysik, Magisterexamen, Adam Mickiewicz University, Polen

Arbetsliv

Anställningar			
Period	Anställning	Del av forskning i anställningen (%)	Arbetsgivare
december 2017 - Nuvarande	Lektor, Tillsvdareanställning	80	Umeå universitet, Sverige, Institutionen för fysik+
maj 2022 - Nuvarande	Professor, Tillsvdareanställning	85	Umeå universitet, Sverige, Institutionen för fysik+
mars 2012 - november 2017	Biträdande lektor, Tillsvdareanställning	80	Umeå universitet, Sverige, Institutionen för fysik+
mars 2010 - februari 2012	Postdoktor	100	University of Colorado Boulder, USA, JILA
april 2009 - december 2009	Forskningsassistent	100	Umeå universitet, Sverige, Institutionen för fysik+
april 2004 - mars 2009	Doktorand	80	Umeå universitet, Sverige, Institutionen för fysik+

Postdoktorvistelser		
Period	Organisation	Ämne
mars 2010 - februari 2012	University of Colorado Boulder, USA, JILA	10302. Atom- och molekylfysik och optik

Uppehåll i forskningen	
Period	Beskrivning
2022-08-22 - 2023-02-28	parental leave 75%, total 4 months
2022-05-16 - 2022-08-21	parental leave 100%, 2 months total
2020-02-27 - 2020-08-16	parental leave single days, 0.5 month total

Period	Beskrivning
2019-08-05 - 2019-12-22	parental leave 25%, 1 month total
2018-11-05 - 2019-06-07	parental leave 25%, 2 months total
2018-08-06 - 2018-11-02	parental leave 75%, 2 months total
2018-05-28 - 2018-06-29	parental leave 100%, 1 month total
2015-10-19 - 2016-05-29	parental leave 50%, 4 months total
2015-08-05 - 2015-10-18	parental leave 75%, 2 months total
2015-03-27 - 2015-06-11	parental leave 100%, 2.5 months total

Meriter och utmärkelser

Docentur		
År	Ämne	Organisation
2018	103. Fysik	Umeå universitet, Sverige, TEKNAT Inst. för fysik

Handledda personer			
År	Handledda personer	Lärosäte (handledld person)	Roll
2027	Doktorand, Andrea Rosina	Umeå universitet, Sverige, TEKNAT Inst. för fysik	Huvudhandledare
2022	Doktorand, Adrian Hjältén	Umeå universitet, Sverige, TEKNAT Inst. för fysik	Huvudhandledare
2021	Doktorand, Chuang Lu	Umeå universitet, Sverige, TEKNAT Inst. för fysik	Huvudhandledare
2019	Doktorand, Alexandra C. Johansson	Umeå universitet, Sverige	Huvudhandledare
2017	Doktorand, Amir Khodabakhsh	Umeå universitet, Sverige	Huvudhandledare
2027	Postdok, Qinxue Nie	Umeå universitet, Sverige, TEKNAT Inst. för fysik	Huvudhandledare
2027	Postdok, Yuan Cao	Umeå universitet, Sverige, TEKNAT Inst. för fysik	Huvudhandledare
2026	Postdok, Aleksandr Balashov	Umeå universitet, Sverige, TEKNAT Inst. för fysik	Huvudhandledare
2023	Postdok, Matthias Germann	Umeå universitet, Sverige	Huvudhandledare
2021	Postdok, Vinicius Silva de Oliveira	Umeå universitet, Sverige, TEKNAT Inst. för fysik	Huvudhandledare
2020	Postdok, Francisco Senna Vieira	Umeå universitet, Sverige, TEKNAT Inst. för fysik	Huvudhandledare
2019	Postdok, Ibrahim Sadiek	Umeå universitet, Sverige, TEKNAT Inst. för fysik	Huvudhandledare
2017	Postdok, Grzegorz Sobon	Umeå universitet, Sverige, TEKNAT Inst. för fysik	Huvudhandledare
2016	Postdok, Lucile Rutkowski	Umeå universitet, Sverige	Huvudhandledare
2016	Postdok, Venkata Ramaiah Badarla	Umeå universitet, Sverige	Huvudhandledare
2014	Postdok, Chadi Abd Alrahman	Umeå universitet, Sverige	Huvudhandledare

Bidrag erhållna i konkurrens

Period	Finansiär	Projektledare	Din roll	Totalt belopp (kr)
2024 - 2026	Kempestiftelserna, Sverige - Annan forskningsfinansiär, Sverige	Aleksandra Foltynowicz Matyba	Projektledare	2 200 000
2022 - 2026	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Aleksandra Foltynowicz Matyba	Projektledare	3 250 000
2021 - 2026	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Aleksandra Foltynowicz Matyba	Projektledare	12 000 000
2017 - 2020	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Aleksandra Foltynowicz Matyba	Projektledare	3 300 000
2016 - 2021	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Aleksandra Foltynowicz Matyba	Projektledare	7 500 000
2013 - 2016	SSF - Stiftelsen för strategisk forskning, Sverige - Annan forskningsfinansiär	Aleksandra Foltynowicz Matyba	Projektledare	3 000 000
2013 - 2016	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Aleksandra Foltynowicz Matyba	Projektledare	3 700 000
2010 - 2012	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Aleksandra Foltynowicz Matyba	Projektledare	740 000

Priser och utmärkelser

År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2025	USA	Optica Fellow	Optica https://www.optica.org/get_involved/awards_and_honors/fellow_members/fellow_profiles/aleksandra_foltynowicz/	https://www.optica.org/get_involved/awards_and_honors/fellow_members/fellow_profiles/aleksandra_foltynowicz/ pageSize=50&pageNumber=1&search=foltynowicz&gender=All&awardKey=7a8441cb-fa79-4073-9519-4f1e1cdaae90&orderBy=Newest%20Recipients

År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2019	USA	Coblentz Award	the Coblentz Society http://www.coblentz.org/awards/the-coblentz-award	The Coblentz Award is presented annually to an outstanding young molecular spectroscopist under the age of 40. This award is the Society's original award (first awarded in 1964), and is the complement of the 'Craver Award' that recognizes young spectroscopists for efforts in applied analytical vibrational spectroscopy. The candidate must be under the age of 40 on January 1 of the year of the award. The award comprises an honorarium, a plaque with a prism from the periscope of a World War II Navy submarine, and a travel allowance. http://www.coblentz.org/awards/the-coblentz-award

År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2016	Frankrike	Peter Werle Early Career Scientist Award	the Advisory Board of FLAIR conference (Field Laser Applications in Industry and Research) https://flair2016.sciencesconf.org/resource/page/id/11	This award is given by the advisory board of the FLAIR (Field Laser Applications in Industry and Research) conference, organized every second year. https://flair2016.sciencesconf.org/resource/page/id/11 'The Peter Werle Award is meant to recognize outstanding early career scientists who best exemplify Peter Werle's scientific attributes, such as: innovation, intellectual honesty, extreme attention to detail, inquisitiveness, strong mathematical and engineering backgrounds, a proven track record of success, and achieving such success by questioning existing thinking and/or technologies.'
2015	Sverige	Kungliga Skytteanska Samfundets teknisk-naturvetenskapliga priset	Kungliga Skytteanska Samfundet	
2013	Sverige	Ingvar Carlsson Award 5	SSF - Stiftelsen för strategisk forskning	

Andra meriter

Period	Typ av merit	Beskrivning
2021 - 2028	Editor	Associate editor • Optics Express (the Optica Society), since Aug 25, 2023 • Applied Physics B (Springer), since Sept 2021

Period	Typ av merit	Beskrivning
2014 - 2025	Conference organization	General chair 2025, Program Chair 2023 of European Quantum Electronics Conference (EQEC); Munich, Germany (2021) • Light, Energy and the Environment Congress; Optics and Photonics for Energy & the Environment (E2), Singapore (2018) ----- Member of the program committee/advisory board of the following international conferences: • European Quantum Electronics Conference (EQEC); Precision Metrology and Frequency Combs, Munich, Germany (2019) • Optical Sensors and Sensing Congress; Optics and Photonics for Sensing the Environment (EM), San Jose, CA (2019) • 73rd International Symposium on Molecular Spectroscopy, Champaign-Urbana, IL (2018); Co-organizer of mini-symposium on 'Frequency comb spectroscopy' • Field Laser Applications in Industry and Research, France/Italy (since 2017) • CLEO; S&I13 Active Optical Sensing, San Jose, CA (2015-17) • Light, Energy and the Environment Congress; Fourier Transform Spectroscopy (FTS) Meeting, Leipzig, Germany (2016)
2012 - 2025	Reviewer	Reviewer for • journals: Science, Nature Communications, Nature Photonics, Communications Chemistry, Optica, Optics Letters, Optics Express, APL Photonics, Applied Physics B, Scientific Reports, Communications Chemistry, Review of Scientific Instruments, Journal of the Optical Society of America B, Spectrochimica Acta A, Laser and Photonics Reviews, Flow, Turbulence and Combustion, Measurement Science and Technology, Physics Letters A, Journal of Selected Topics in Quantum Electronics and • funding agencies: European Research Council, Science Foundation Ireland, Netherlands Organisation for Scientific Research, Polish National Science Centre, Fund for Scientific Research - Belgium, Helmholtz Young Investigators Group - Germany
2012 - 2025	Thesis evaluator	• Santeri Larnimaa, PhD, University of Helsinki, Finland, 2025 • David Gustavsson, PhD, Lund University, 2024 • Adriana Canales, PhD, Chalmers University of Technology, 2023 • Andreas Nordenström, PhD, Umeå University, 2023 • Artem Iakunkov, PhD, Umeå University, 2021 • Muhammad Ali Abbas, PhD, Radboud University Nijmegen, the Netherlands, 2021 • Alexander Muschet, PhD, Umeå University, 2021 • Qitao Hu, PhD, Uppsala University, 2021 • Wissam Fakhardji, PhD, Luleå Technical University, 2021 • Robert Lindberg, PhD, Kungliga Tekniska Högskolan, 2020 • Faisal Nadeem, PhD, Radboud University, Nijmegen, the Netherlands (2020) • Attila Fülöp, PhD Chalmers University of Technology, Gothenburg (2018) • Maïte Louisy, PhD, Lund University (2018) • Linnea Rading, PhD, Lund University (2017) • Lucile Rutkowski, PhD, Université Claude Bernard Lyon 1, France (2014) • Dmitry Kobayakov, licentiate, Umeå University (2012)
2011 - 2025	Invited talks	• Swedish Physics Days, Sweden, 2025 (plenary); • 17th Biennial HITRAN Conference, USA, 2024; • European Conference on Nonlinear Optical Spectroscopy (ECONOS), Austria, 2024; • CLEO US, USA, 2023; • European Group on Atomic Systems (EGAS), France, 2023; • European Optical Society Annual meeting (EOSAM), online 2021; • High-brightness Sources and Light-driven Interactions Congress, online 2020; • International Symposium on Molecular Spectroscopy, USA, 2019 (plenary talk); • Cavity Enhanced Spectroscopy, USA, 2019; • CLEO US, USA, 2019; • 25th Colloquium on High Resolution Molecular Spectroscopy, Finland, 2017; • Optics and Photonics in Sweden, 2016; • Laser Applications to Chemical, Security and Environmental Analysis, Germany, 2016; • 23rd International Conference on Spectral Line Shapes, Poland, 2016; • Light, Energy and the Environment Congress, Australia, 2014; • Field Laser Applications in Industry and Research, Germany, 2011 (plenary talk); • Cavity Enhanced Spectroscopy, Canada, 2011

Medverkande forskare: Anne L'Huillier
Födelsedatum: 19580816
Kön: Kvinna
Land: Sverige

Dr-examen: 1986-01-06
Akademisk titel: Professor
Arbetsgivare: Lunds universitet

Utbildning

Forskarutbildning			
Examen	Organisation	Avhandlingens titel	Namn på handledare
Doktorsexamen, 10302. Atom- och molekylfysik och optik, 1986-01-06	Université Paris VI Pierre et Marie CURIE, Frankrike	Ionisation multiphotonique et multiélectronique	Gérard Mainfray

Utbildning på grund- och avancerad nivå	
År	Examen
1980	101. Matematik, Lärarexamen, École normale supérieure, Frankrike
1979	103. Fysik, Masterexamen, Université Paris VI Pierre et Marie CURIE, Frankrike
1979	101. Matematik, Masterexamen, Université Paris VI Pierre et Marie CURIE, Frankrike

Arbetsliv

Anställningar				
Period	Anställning	Del av forskning i anställningen (%)	Arbetsgivare	Övrig information
juli 1997 - Nuvarande	Professor, Tillsvidareanställning	80	Lunds universitet, Sverige, Fysiska institutionen 107131	
juli 1995 - juni 1997	Lektor, Tidsbegränsad anställning	80	Lunds universitet, Sverige, Fysiska institutionen 107131	75% VR-finansierat
oktober 1986 - juni 1995	Forskare, Tillsvidareanställning	100	Commissariat à l'Energie Atomique, Frankrike, Centre d'Etudes de Saclay	
oktober 1981 - januari 1986	Doktorand, Tidsbegränsad anställning	100	Commissariat à l'Energie Atomique, Frankrike, Centre d'Etudes de Saclay	

Postdoktorvistelser		
Period	Organisation	Ämne
oktober 1988 - april 1989	University Southern California, USA, Physics Department	10302. Atom- och molekylfysik och optik
januari 1986 - oktober 1986	Chalmers tekniska högskola, Sverige, 160501 - Kondenserade materiens fysik	10302. Atom- och molekylfysik och optik

Forskarutbyten			
Period	Typ	Organisation	Ämne
mars 1993 - september 1993	Gästforskare	Lawrence Livermore National Laboratory	10302. Atom- och molekylfysik och optik

Uppehåll i forskningen	
Period	Beskrivning
2000-04-01 - 2001-03-01	Mammaledighet för Victor född 2000-04-05
1999-01-01 - 1999-12-01	Mammaledighet för Oscar född 1999-01-07

Meriter och utmärkelser

Docentur		
År	Ämne	Organisation
1995	103. Fysik	Lunds universitet, Sverige, Fysiska institutionen 107131

Handledda personer			
År	Handledda personer	Lärosäte (handledd person)	Roll
2024	Doktorand, Ann-Kathrin Raab	Lunds universitet, Sverige, Fysiska institutionen 107131	Huvudhandledare
2023	Doktorand, Robin Weissenbilder	Lunds universitet, Sverige	Huvudhandledare
2020	Doktorand, David Busto	Lunds universitet, Sverige	Huvudhandledare
2019	Doktorand, Marcus Isinger	Lunds universitet, Sverige	Huvudhandledare
2018	Doktorand, Chen Guo	Lunds universitet, Sverige	Huvudhandledare
2018	Doktorand, Hélène Coudert-Alteirac	Lunds universitet, Sverige	Huvudhandledare
2018	Doktorand, Maïté Louisy	Lunds universitet, Sverige	Huvudhandledare
2016	Doktorand, David Kroon	Lunds universitet, Sverige	Huvudhandledare
2014	Doktorand, Christoph Heyl	Lunds universitet, Sverige	Huvudhandledare
2014	Doktorand, Diego Guénot	Lunds universitet, Sverige	Huvudhandledare
2014	Doktorand, Piotr Rudawski	Lunds universitet, Sverige	Huvudhandledare
2012	Doktorand, Kathrin Klünder	Lunds universitet, Sverige	Huvudhandledare
2012	Doktorand, Miguel Miranda	Lunds universitet, Sverige	Huvudhandledare
2011	Doktorand, J Marcus Dahlström	Lunds universitet, Sverige	Huvudhandledare
2022	Doktorand, Ivan Systeich	Lunds universitet, Sverige	Bihandledare
2023	Postdok, Sizuo Luo	Lunds universitet, Sverige	Huvudhandledare
2022	Postdok, Sara Mikaelsson	Lunds universitet, Sverige	Huvudhandledare
2021	Postdok, Jan Vogelsang	Lunds universitet, Sverige	Huvudhandledare
2020	Postdok, Fabien Langer	Lunds universitet, Sverige	Huvudhandledare
2020	Postdok, Shiyang Zhong	Lunds universitet, Sverige	Huvudhandledare

Bidrag erhållna i konkurrens					
Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2024 - 2027	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Anne L'Huillier	Projektledare	0	4 055 000

Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2024 - 2031	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Anne L'Huillier	Projektledare	0	40 000 000
2023 - 2025	Europeiska Unionen (EU),	Anne L'Huillier	Projektledare	0	1 500 000
2021 - 2025	Europeiska Unionen (EU),	Anne L'Huillier	Projektledare	0	25 000 000
2014 - 2019	Europeiska Unionen (EU),	Anne L'Huillier	Projektledare	0	18 330 000
2014 - 2023	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Anne L'Huillier	Projektledare	0	25 000 000
2014 - 2023	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Anne L'Huillier	Projektledare	0	50 000 000
2010 - 2016	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Anne L'Huillier	Projektledare	0	15 000 000
2009 - 2014	Europeiska Unionen (EU),	Anne L'Huillier	Medverkande	5 000 000	33 003 781
2008 - 2013	Europeiska Unionen (EU),	Anne L'Huillier	Projektledare	0	20 621 475

Priser och utmärkelser				
År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2023	Tyskland	Leibinger Zukunpfpris	Leibinger Foundation	
2023	Sverige	Nobel Prize in Physics	Nobel Foundation	
2022	Spanien	BBVA Frontiers of knowledge award	BBVA foundation	
2022	Israel	Wolf prize	Wolf Foundation	
2021	USA	Max Born award	Optica	
2020	Sverige	Göteborg Lise Meitner award	Göteborg Physics Center	
2019	Frankrike	EPS/QEOD prize for fundamental aspects of quantum electronics and optics	European Physical Society	
2013	Tyskland	Carl Zeiss Research award	Carl Zeiss Foundation	
1998	Sverige	Göran Gustafson priset	Göran Gustafson stiftelse	
1990	Frankrike	Prix Aimé Cotton	French Physical Society	

Andra meriter		
Period	Typ av merit	Beskrivning
2004 - 2030	Academy membership	Elected to the Royal Swedish Academy of Sciences
2018 - 2030	Academy membership	Elected Foreign associate to the National Academy of Sciences (USA)

Period	Typ av merit	Beskrivning
2022 - 2030	Academy membership	Foreign associate of the French Académie des Sciences
2021 - 2027	Principal Investigator	PI of the Wallenberg Center for Quantum Information
2023 - 2023	Scientific Council member	Member of the scientific council of the Institut Pascal, Université Paris-Saclay, France
2017 - 2021	Board member	Member of the Board of the AMO Physics Division of the European Physical Society
2017 - 2019	Board member	Member of the board of the Physics Department at Lund University
2014 - 2016	Expert ERC	Member (2014) and Chairman (2016) of the PE2 panel for Consolidator grants (European Research Council)
2011 - 2016	Board member	Member of the board of MAX IV
2014 - 2016	SAC member	Member of the Scientific Advisory Committee of ELI-ALPS, Szeged, Hungary
2006 - 2010	Coordinator of EU training site	Coordinator of a European Marie Curie Early Stage Training site: "Emerging X-ray science and technology: Combining Laser and Accelerator Physics" (MAXLAS)

Immaterialrätt

Immaterialrätt					
Typ	Datum för beviljning	Status	ID	Licensierad till annan	Produkt klassificering
Patent	2013-04-18	Beviljad	WO2013/0542 92 A1	Ej Sverige - Företag	26. Datorer, elektronikvaror och optik
Patent		Beviljad	PCT/IB2018/0 58792	Ej Sverige - Företag	26. Datorer, elektronikvaror och optik

CV - Mattias Marklund

Medverkande forskare: Mattias Marklund
Födelsedatum: 19701210
Kön: Man
Land: Sverige

Dr-examen: 1998-05-28
Akademisk titel: Professor
Arbetsgivare: Chalmers tekniska högskola

Utbildning

Forskarutbildning			
Examen	Organisation	Avhandlingens titel	Namn på handledare
Doktorsexamen, 10305. Astronomi, astrofysik och kosmologi, 1998-05-28	Umeå universitet, Sverige, Institutionen för fysik+	Construction of solutions to Einstein's field equations	Michael Bradley

Utbildning på grund- och avancerad nivå

År **Examen**

År	Examen
1993	10199. Annan matematik, Kandidatexamen, Umeå universitet, Sverige

Arbetsliv

Anställningar				
Period	Anställning	Del av forskning i anställningen (%)	Arbetsgivare	Övrig information
januari 2019 - Nuvarande	Professor, Tillsvidareanställning	75	Göteborgs universitet, Sverige, Fysik, inst för	
januari 2016 - Nuvarande	Head of Division for Theoretical Physics, Tillsvidareanställning	0	Chalmers tekniska högskola, Sverige, 160711 - Teoretisk fysik	
maj 2025 - Nuvarande	Professor, Tillsvidareanställning	90	Chalmers tekniska högskola, Sverige, Inst för Fysik	Head of Department
januari 2013 - december 2018 (Nuvarande)	Professor, Tillsvidareanställning	60	Chalmers tekniska högskola, Sverige, 160711 - Teoretisk fysik	Förestår Centrum för grundläggande vetenskaper (Chalmers/GU) på 20% av min tid
mars 2014 - december 2017	Föreståndare, Centrum för grundläggande vetenskaper, Tidsbegränsad anställning	20	Chalmers tekniska högskola, Sverige, Inst för Matematiska vetenskaper	
juli 2006 - december 2012	Professor, Tillsvidareanställning	100	Umeå universitet, Sverige, Institutionen för fysik+	
juli 2004 - juni 2006	Lektor, Tillsvidareanställning	75	Umeå universitet, Sverige, Institutionen för fysik+	
juli 2000 - juni 2004	Forskarassistent, Tidsbegränsad anställning	100	Chalmers tekniska högskola, Sverige, Inst för Rymd- och geovetenskap	
juli 1999 - juni 2000	Forskare, Tillsvidareanställning	100	Totalförsvarets forskningsinstitut, Sverige, Försvars- och säkerhetssystem	

Postdoktorvister		
Period	Organisation	Ämne
januari 1999 - december 1999	Universitet i Kapstaden, Sydafrika, Department of Mathematics and Applied Mathematics	10305. Astronomi, astrofysik och kosmologi

Forskarutbyten			
Period	Typ	Organisation	Ämne
juli 2014 - september 2014	Gästforskare	University of California, Santa Barbara, USA, Kavli Institute for Theoretical Physics	10302. Atom- och molekylfysik och optik
april 2008 - april 2008	Gästforskare	Nordita	10303. Fusion, plasma och rymdfysik
september 2007 - september 2007	Gästforskare	École Polytechnique Paris, Frankrike, Physics	10302. Atom- och molekylfysik och optik
maj 2006 - maj 2006	Gästforskare	Radboud Universiteit, Nederländerna, Astronomy	10305. Astronomi, astrofysik och kosmologi
april 2006 - maj 2006	Gästforskare	Rutherford Appleton Laboratory	10302. Atom- och molekylfysik och optik
mars 2006 - mars 2006	Gästforskare	Max Planck Institut für Kernphysik	10302. Atom- och molekylfysik och optik
maj 2005 - maj 2005	Gästforskare	Radboud Universiteit, Nederländerna, Astronomy	10305. Astronomi, astrofysik och kosmologi
april 2005 - april 2005	Gästforskare	Instituto Superior Técnico	10302. Atom- och molekylfysik och optik
januari 2004 - juni 2004	Gästforskare	Ruhr-Universität Bochum, Tyskland, Theoretische Physik IV	10303. Fusion, plasma och rymdfysik
april 1997 - maj 1997	Gästforskare	Wigner Fizikai Kutatóközpont, Ungern, Theoretical Physics	10305. Astronomi, astrofysik och kosmologi
april 1996 - maj 1996	Gästforskare	Wigner Fizikai Kutatóközpont, Ungern, Theoretical Physics	10305. Astronomi, astrofysik och kosmologi
april 1995 - maj 1995	Gästforskare	Wigner Fizikai Kutatóközpont, Ungern, Theoretical Physics	10305. Astronomi, astrofysik och kosmologi

Meriter och utmärkelser

Docentur		
År	Ämne	Organisation
2001	103. Fysik	Chalmers tekniska högskola, Sverige, 7517 - Plasmafysik och fusionsenergi

Handledda personer			
År	Handledda personer	Lärosäte (handledld person)	Roll
2019	Doktorand, Benjamin Svedung Wettervik	Chalmers tekniska högskola, Sverige, Inst för Fysik	Huvudhandledare
2019	Doktorand, Joel Magnusson	Chalmers tekniska högskola, Sverige	Huvudhandledare
2017	Doktorand, Erik Wallin	Chalmers tekniska högskola, Sverige	Huvudhandledare
2012	Doktorand, Jens Zamanian	Umeå universitet, Sverige	Huvudhandledare
2011	Doktorand, Joakim Lundin	Umeå universitet, Sverige	Huvudhandledare
2005	Doktorand, Gerold Betschart	Chalmers tekniska högskola, Sverige	Huvudhandledare
2016	Doktorand, Oleg Iukhymenko	Umeå universitet, Sverige	Bihandledare

År	Handledda personer	Lärosäte (handledd person)	Roll
2014	Doktorand, Dmitry Kobaykov	Umeå universitet, Sverige	Bihandledare
2014	Doktorand, Martin Stefan	Umeå universitet, Sverige	Bihandledare
2011	Doktorand, Mikhail Modestov	Umeå universitet, Sverige	Bihandledare
2006	Doktorand, Pontus Johannisson	Chalmers tekniska högskola, Sverige	Bihandledare
2017	Postdok, Tom Blackburn	Chalmers tekniska högskola, Sverige	Huvudhandledare
2016	Postdok, Christopher Harvey	Chalmers tekniska högskola, Sverige	Huvudhandledare
2016	Postdok, Felix Mackenroth	Chalmers tekniska högskola, Sverige	Huvudhandledare
2015	Postdok, Arkady Gonoskov	Chalmers tekniska högskola, Sverige	Huvudhandledare
2013	Postdok, Ivan Gonoskov	Umeå universitet, Sverige	Huvudhandledare
2012	Postdok, Amol Holkundkar	Umeå universitet, Sverige	Huvudhandledare
2012	Postdok, Christopher Harvey	Umeå universitet, Sverige	Huvudhandledare
2012	Postdok, Tobias Hansson	Umeå universitet, Sverige	Huvudhandledare
2011	Postdok, Amar Misra	Umeå universitet, Sverige	Huvudhandledare

Bidrag erhållna i konkurrens					
Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2025 - 2027	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Mattias Marklund	Projektledare	0	2 000 000
2023 - 2026	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Mattias Marklund	Projektledare	0	4 500 000
2020 - 2024	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	László Veisz	Medverkande	4 500 000	18 000 000
2014 - 2019	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Tünde Fülöp	Projektledare	0	38 000 000
2014 - 2016	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Mattias Marklund	Projektledare	0	1 800 000
2013 - 2016	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Mattias Marklund	Projektledare	0	4 200 000
2012 - 2017	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Johannes Messenger	Projektledare	0	40 000 000
2008 - 2013	Europeiska Unionen (EU),	Mattias Marklund	Projektledare	0	10 000 000
2008 - 2010	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Mattias Marklund	Projektledare	0	2 229 000
2005 - 2007	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Mattias Marklund	Projektledare	0	1 417 500

Priser och utmärkelser

År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2023	Sverige	Member of The Royal Swedish Academy of Engineering Sciences (IVA)	IVA	
2005	Sverige	The Tage Erlander Prize	Royal Academy of Sciences	
2005	Sverige	Royal Skyttean Society Prize	Royal Skyttean Society	

Andra meriter

Period	Typ av merit	Beskrivning
2019 - 2020	Head of evaluation committee for accelerators for subatomic, particle and nuclear physics	Committee appointed by the Swedish Research Council infrastructure committee in order to evaluate the funding situation for accelerator based research in subatomic, nuclear and particle physics.
2018 - 2019	Deputy Chair	Deputy Chair for Supercomputing National Allocation Committee, Sweden
1998 - 2019	Invited talks/plenaries	Over 80 invited talks and plenaries at conferences, workshops, and summer schools.
2019 - 2019	Deputy Chair	Deputy Chair for review panel NT-3, Swedish Research Council.
2009 - 2019	Review Panel Member	Review panel member, Supercomputing National Allocation Committee for supercomputing infrastructure, Swedish Research Council.
2012 - 2016	User Consortium Member	Member of the User Consortium for the Helmholtz International Beamline for Extreme Fields (HIBEF) at the European XFEL, Helmholtz-Centrum Dresden-Rossendorf, Dresden, Germany.
2010 - 2016	Strong Research Environments	PI member of three Strong Research Environments at Umeå University: Light in Science and Technology, Solar Fuels, and Umeå Plant Science Centre.
2008 - 2013	Associate Member	Associate Member, Umeå Plant Science Centre, Umeå University/Swedish University of Agricultural Sciences.
2008 - 2011	Review Panel Member	Review panel member, Swedish Research Council review panel on atomic and molecular physics, space physics and plasma physics, and fusion (2008); review panel on atomic and molecular physics, condensed matter physics (2009, 2011).
2010 - 2010	Expert assignment	Author of the Swedish Research Council topical overview on fusion, space, and plasma physics.
2009 - 2009	Review Panel Member	Review panel member for Helmholtz Institut Jena.
2005 - 2007	Board Member	Board Member, Swedish National Graduate School in Space Physics.

CV - Valdas Pasiskevicius

Medverkande forskare: Valdas Pasiskevicius
Födelsedatum: 19630809
Kön: Man
Land: Sverige

Dr-examen: 1996-12-20
Akademisk titel: Professor
Arbetsgivare: Kungliga Tekniska högskolan

Utbildning**Forskarutbildning**

Examen	Organisation	Namn på handledare
Doktorsexamen, 10304. Den kondenserade materiens fysik, 1996-12-20	Puslaidininkiu Fizikos Institutas, Litauen	Arunas Krotkus

Utbildning på grund- och avancerad nivå

År	Examen
1986	10304. Den kondenserade materiens fysik, Magisterexamen, Vilnius University, Litauen

Arbetsliv

Anställningar				
Period	Anställning	Del av forskning i anställningen (%)	Arbetsgivare	Övrig information
september 2022 - Nuvarande	Scientific director KTH Laser Lab infrastructure, Tillsvidareanställning	10	Kungliga Tekniska högskolan	
januari 2009 - Nuvarande	Professor, Tillsvidareanställning	75	Kungliga Tekniska högskolan, Sverige, Institutionen för Tillämpad fysik	
januari 2002 - december 2008	Docent, Tillsvidareanställning	100	Kungliga Tekniska högskolan	Docent
januari 1998 - december 2002	Forskare	100	Kungliga Tekniska högskolan	
januari 1993 - december 1996	Doktorand	100	Puslaidininkiu Fizikos Institutas	
januari 1991 - december 1992	Forskare	100	Puslaidininkiu Fizikos Institutas	
september 1986 - december 1990	Forskningsassistent	100	Puslaidininkiu Fizikos Institutas	

Postdoktorvistelser

Period	Organisation	Ämne
januari 1997 - december 1998	Kungliga Tekniska högskolan, Sverige	10302. Atom- och molekylfysik och optik

Forskarutbyten

Period	Typ	Organisation	Ämne
oktober 2011 - november 2011	Gästprofessor	Gwangju Institute of Science and Technology	10302. Atom- och molekylfysik och optik
juni 2002 - juli 2002	Gästforskare	Max-Born Institute for Ultrafast Spectroscopy	10301. Subatomär fysik
november 2000 - december 2000	Gästforskare	Vilnius University, Litauen, Quantum Electronics	10302. Atom- och molekylfysik och optik
juni 1999 - juni 1999	Gästforskare	Max-Born Institute for Ultrafast Spectroscopy	10302. Atom- och molekylfysik och optik

Period	Typ	Organisation	Ämne
september 1998 - oktober 1998	Gästforskare	Danmarks Tekniske Universitet	10302. Atom- och molekylfysik och optik

Meriter och utmärkelser

Docentur		
År	Ämne	Organisation
2002	103. Fysik	Kungliga Tekniska högskolan, Sverige

Handledda personer			
Handledda personer	Lärosäte (handledd person)	Roll	Antal
Doktorand	Kungliga Tekniska högskolan, Sverige	Huvudhandledare	23
Doktorand	Karolinska Institutet, Sverige	Bihandledare	1
Doktorand	Kungliga Tekniska högskolan, Sverige	Bihandledare	10
Postdok		Huvudhandledare	6

Bidrag erhållna i konkurrens					
Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2024 - 2025	ESA, Ej Sverige - Internationella organisationer, Nederländerna	Valdas Pasiskeficius	Projektledare	0	2 000 000
2022 - 2026	Europeiska Unionen (EU),	V. Pasiskevicius	Projektledare	0	3 000 000
2019 - 2022	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Valdas Pasiskevicius	Projektledare	0	3 350 000
2019 - 2021	Office for Navy Research, Ej Sverige - Statliga enheter, USA	Valdas Pasiskevicius	Projektledare	0	2 400 000
2013 - 2016	Sverige - Övriga statliga myndigheter,	V. Pasiskevicius	Projektledare	0	4 600 000
2013 - 2017	Ej Sverige - Internationella organisationer,	V. Pasiskevicius	Projektledare	0	1 140 000
2013 - 2016	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Valdas Pasiskevicius	Projektledare	0	4 600 000
2008 - 2010	Europeiska Unionen (EU),	V. Pasiskevicius	Projektledare	0	3 700 000
2006 - 2008	Sverige - Övriga statliga myndigheter,	V. Pasiskevicius	Projektledare	0	1 788 900
2003 - 2007	Sverige - Övriga privata utförare,	M. Larsson	Medverkande	12 000 000	24 000 000

Priser och utmärkelser

År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2018	USA	OSA fellow	Optical Society of America	

Andra meriter				
Period	Typ av merit	Beskrivning		
2025 - 2028	Member of Board of directors European Optical Society	European Optical Society		
2021 - 2028	Director KTH Laser Lab research infrastructure	KTH Laser Lab internal research infrastructure		
2025 - 2027	National coordinator LaserLab Sweden	National network LaserLab Sweden		
2018 - 2027	Board Member LaserLab Sweden	National Swedish network of laser facilities LaserLab Sweden		
2008 - 2025	Grant evaluation committees National, EU and outside EU.	National Science Center, Poland (2016, 2017). Swedish board for internationalization of research, STINT (2008). Lithuanian Center for Physical Sciences and Technology (2010). National Research Foundation of Qatar (2013, 2014, 2015). Danish Council for Independent Research (DFF) (2014). Lithuanian Research Council (2011- 2012). Agence Nationale de Recherche, France (2011). Scientific and Technological Research Council of Turkey (2011) European Comission ERC starting, Continuation and Advanced grants, Horizon program grants, COST program grants.		
2018 - 2021	Member of Steering committee CLEO Europe	Conference on Lasers and Electrooptics Europe		
2019 - 2021	General Chair CLEO Europe	Conference on Lasers and Electrooptics - Europe		
2012 - 2020	Editorial Board member Nature Publishing group	Nature Publishing Group. Scientific Reports		
2014 - 2020	Board member European Physical Society QEOD	European Physical Society, Quantum Electronics and Optics Division		
2019 - 2019	Chair of the committee for EPS prizes in Quantum Electronics	European Physical Society Committee for Prizes in Quantum Electronics		
2017 - 2018	Guest Editor IEEE Journal of Selected Topics in Quantum Electronics	Guest editor, IEEE Journal of Selected Topics in Quantum Electronics		
2012 - 2018	Chair of Steering committee Europhoton conference	Europhoton conference		
1996 - 2016	Learned Society memberships Optica (fellow), European Optical Society, European Physical Society, Swedish Optical Society	Optical Society of America, European Physical Society, European Optical Society, Swedish Optical Society		
2011 - 2016	Employment and evaluation committees KTH, Italy, Lithuania, Israel	KTH, School of Engineering Sciences (2015-). Employment committee Vilnius University, Lithuania (2011). Employment committee Bar Ilan University, Israel (2011). University of Pavia, Italy (2015). Performance evaluation committee, Center for Physical Science and Technology, Lithuanian Research Council (2010)		
2014 - 2016	Member of Steering committee CLEO USA	Conference on Lasers and Electrooptics CLEO, USA 2014-2016		

Period	Typ av merit	Beskrivning
2016 - 2016	General Chair CLEO, USA	Conference on Lasers and Electrooptics, CLEO, USA
2010 - 2016	Topical Editor Journal of the Optical Society of America B	Journal of the Optical Society of America B
2013 - 2014	OECD represeantve for evaluation of Italian Universities	OECD representative on the commission for Applied Physics for National Agency for the Evaluation of Universities and Research Institutes, Italy
2012 - 2012	General Chair QEOD Europhoton conference	Europhoton (European Physical Society)
2009 - 2009	Conference chair: Mid infrared coherent sources 2009 Caen, France.	Mid infrared coherent sources, 2009, France.

Immaterialrätt

Immaterialrätt					
Typ	Datum för beviljning	Status	ID	Licensierad till annan	Produkt klassificering
Patent	2008-06-10	Beviljad	PCT/SE200805 0689	Nej	26. Datorer, elektronikvaror och optik
Patent	2007-04-17	Beviljad	SE529039 C2 , EP 06812952 A,US 8429606 A	Sverige - Försvarsmakter (tex. Försvarsmakten, FMV, FOI)	26. Datorer, elektronikvaror och optik
Patent	2006-07-27	Beviljad	US 7,269,189	Sverige - Företag (även statliga och kommunala bolag samt statliga affärsdrivande verk)	26. Datorer, elektronikvaror och optik
Patent	2006-06-09	Beviljad	PCT/SE2006/0 00681	Nej	26. Datorer, elektronikvaror och optik
Patent	2004-08-17	Beviljad	US 6778563	Sverige - Företag (även statliga och kommunala bolag samt statliga affärsdrivande verk)	26. Datorer, elektronikvaror och optik

CV - László Veisz

Medverkande forskare: László Veisz
Födelsedatum: 19740320
Kön: Man
Land: Sverige

Dr-examen: 2003-08-28
Akademisk titel: Professor
Arbetsgivare: Umeå universitet

Utbildning

Forskarutbildning

Examen	Organisation	Avhandlingens titel	Namn på handledare
Doktorsexamen, 10302. Atom- och molekyelfysik och optik, 2003-08-28	Friedrich-Schiller-Universität Jena, Tyskland, Institut für Optik und Quantenelektronik	Investigation of parametric instabilities in femtosecond laser-produced plasmas	Roland Sauerbrey

Utbildning på grund- och avancerad nivå

År Examen

1997 10302. Atom- och molekyelfysik och optik, Magisterexamen, Eötvös Loránd Tudományegyetem, Ungern

Arbetsliv

Anställningar				
Period	Anställning	Del av forskning i anställningen (%)	Arbetsgivare	Övrig information
april 2016 - Nuvarande	Professor, Tillsvidareanställning	90	Umeå universitet, Sverige, Institutionen för fysik+	
maj 2015 - mars 2016	Professor, Tillsvidareanställning	10	Umeå universitet, Sverige, Institutionen för fysik+	on 90% leave
juli 2011 - mars 2016	Deputy of director Ferenc Krausz, Tillsvidareanställning	100	Max Planck Institut für Quantenoptik, Tyskland, Laboratory for Attosecond Physics	
mars 2011 - mars 2016	Forskare	100	Max Planck Institut für Quantenoptik, Tyskland, Laboratory for Attosecond Physics	

Postdoktorvistelser		
Period	Organisation	Ämne
oktober 2004 - februari 2011	Max Planck Institut für Quantenoptik, Tyskland, Laboratory for Attosecond Physics	10302. Atom- och molekyelfysik och optik
april 2003 - september 2004	Technische Universität Wien, Österrike, Institut für Photonik	10302. Atom- och molekyelfysik och optik

Meriter och utmärkelser

Handledda personer			
Handledda personer	Lärosäte (handledd person)	Roll	Antal
Doktorand	Ludwig Maximilian Universität München, Tyskland	Huvudhandledare	6

Handledda personer	Lärosäte (handledd person)	Roll	Antal
Doktorand	Umeå universitet, Sverige, TEKNAT Inst. för fysik	Huvudhandledare	6
Doktorand	Ludwig Maximilian Universität München, Tyskland	Bihandledare	6
Doktorand		Bihandledare	2
Postdok	Max Planck Institut für Quantenoptik, Tyskland	Huvudhandledare	14
Postdok	Umeå universitet, Sverige, TEKNAT Inst. för fysik	Huvudhandledare	6

Bidrag erhållna i konkurrens					
Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2025 - 2030	Knut och Alice Wallenbergs Stiftelse, Sverige - Övriga privata utförare, Sverige	Raimund Feifel	Medverkande	5 706 000	34 000 000
2025 - 2027	Kempestiftelserna, Sverige - Övriga privata utförare, Sverige	Laszlo Veisz	Projektledare	0	820 000
2021 - 2024	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	László Veisz	Projektledare	0	3 280 000
2020 - 2025	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	László Veisz	Projektledare	0	18 000 000
2020 - 2025	Knut och Alice Wallenbergs Stiftelse, Sverige - Övriga privata utförare	Eva Olsson	Medverkande	5 000 000	25 000 000
2019 - 2020	Umeå University, Medeldyr utrustning VT 2019, Sverige - Universitet och högskolor	Laszlo Veisz	Projektledare	0	920 000
2018 - 2019	Kempestiftelserna, Sverige - Övriga privata utförare, Sverige	Laszlo Veisz	Projektledare	0	900 000
2017 - 2020	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	László Veisz	Projektledare	0	3 000 000
2016 - 2017	Kempestiftelserna, Sverige - Övriga privata utförare	Laszlo Veisz	Projektledare	0	5 000 000

Priser och utmärkelser				
År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2023	Sverige	IEEE Senior member	IEEE	
2021	Sverige	Optica Senior member	Optica	

År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2003	Österrike	Lisa Meitner Fellowship Photonics Institute Technical University of Vienna	Fonds zur Förderung der wissenschaftlichen Forschung	1 year

Andra meriter

Period	Typ av merit	Beskrivning
2024 - 2025	Member of Scientific and Technical Advisory Board of EuPRAXIA Project	Member of Scientific and Technical Advisory Board of EuPRAXIA Project 2024-
2020 - 2025	Secretary and board Member of the IEEE Photonics Society, Sweden Chapter	Secretary and board Member of the IEEE Photonics Society, Sweden Chapter 2020-
2020 - 2025	Member of the Scientific Advisory Committee of Ångström Laser	Member of the Scientific Advisory Committee of Ångström Laser, FREIA Laboratory, Uppsala University 2020 –
2016 - 2025	Board Member of Laserlab Sweden	Board Member of Laserlab Sweden 2016-
2024 - 2025	Member of Local Organizing Committee of ATTO X	Member of Local Organizing Committee of ATTO X Conference, Lund, Sweden, July 6-11 2025
2021 - 2025	Program committee member of CLEO/Europe	Program committee member of Conference on Lasers and Electro- Optics/Europe (CLEO/Europe), Munich, Germany 2021, 2023, 2025
2014 - 2025	Member of the Physics Panel, Hungarian Scientific Research Fund	Member of the Physics Panel, Hungarian Scientific Research Fund 2014, 2016, 2024, 2025
2020 - 2024	Program committee member of EPS-QEOD	Program committee member of EPS-QEOD Europhoton Conference 2020, 2024
2018 - 2024	Program committee member of HILAS	Program committee member of High-Intensity Lasers and High-Field Phenomena (HILAS), 2018, 2020, 2022, 2024
2015 - 2019	Program committee member of UFO	Ultrafast Optics Conference (UFO) program committee member in 2015, 2019
2017 - 2019	Program committee member of CLEO	Conference on Lasers and Electro-Optics (CLEO) program committee member in 2017, 2018, 2019

Registrera

Villkor

Ansökan ska förutom av den sökande även signeras av behörig företrädare för medelsförvaltaren. Företrädaren är vanligtvis prefekten vid den institution där forskningen ska bedrivas men beror på medelsförvaltares organisationsstruktur.

Signering av den *sökande* innebär en bekräftelse av att

- uppgifterna i ansökan är korrekta och följer Vetenskapsrådets instruktioner
- eventuella bisysslor och kommersiella bindningar har redovisats för medelsförvaltaren och att det där inte framkommit något som strider mot god forskningssed
- de tillstånd och godkännanden som krävs finns innan forskningen påbörjas, exempelvis tillstånd från Läkemedelsverket eller godkännande från Etikprövningsmyndigheten respektive djurförsöksetisk nämnd
- sökande kommer att följa samtliga övriga villkor som gäller för bidraget.

Signering av *medelsförvaltaren* innebär en bekräftelse av att

- den beskrivna forskningen eller forskningsstödande verksamheten kan beredas plats vid medelsförvaltaren under den tid och i den omfattning som anges i ansökan
- den sökande kommer vara anställd vid medelsförvaltaren under den tid som ansökan avser
- medelsförvaltaren godkänner kostnadsberäkningen i ansökan
- medelsförvaltaren kommer att följa samtliga övriga villkor som gäller för bidraget.

Ovanstående punkter ska ha diskuterats mellan parterna innan företrädaren för medelsförvaltaren godkänner och signerar ansökan.