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## NOMINATION LETTER

External nomination, natural sciences

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## Nomination for the Wallenberg Academy Fellows Program 2023

Uppsala University hereby nominates Dr **Thomas Nordlander** to the Wallenberg Academy Fellows program with the research project "*The first stars in the universe*".

The main focus of Dr Nordlander's research is to study different aspects of Galactic chemical evolution. The very first stars were responsible for the formation of the heavy elements in the Cosmos, subsequently distributed throughout the Universe through supernova explosions. The properties of the first-generation stars are thus immensely important for our understanding of the early evolution of the Universe. First generation stars can no longer be observed but in this project, Dr Nordlander will focus on identifying and observing second generation stars that still carry the chemical signatures of the first generation. His experience as an observer at internationally competitive observatories in combination with his expertise in interpreting stellar spectroscopic data puts Dr Nordlander in a unique position able to shine some light on the formation of our Galaxy and our place in the Universe.

Dr Nordlander is currently a Stromlo Fellow at the Research School of Astronomy and Astrophysics, Australian National University, ranked 43rd in the Times Higher Education rankings for physics. His h-index (31) is in the top percentile for astronomers 6–10 years after their PhD and his publication statistics puts him well above his peers. He has successfully obtained significant supercomputing and telescope resources through highly competitive applications. He shows great promise as a research leader, as he is currently primary supervisor of two PhD students and has co-supervised several PhD students and a large number of undergraduate students. He has undertaken research supervision training as well as unconscious bias training.

Dr Nordlander's competence, combining observational and theoretical spectroscopy, fits well in the center of the research performed within the division for astronomy and space physics at the Department of Physics and Astronomy. He will complement the ongoing work on spectroscopy for cool stars and metal-poor stars in the atomic astrophysics group as well as to the theoretical modelling of stellar spectra, and the Galactic/extra-Galactic connection. His strong international connections (ANU, Monash/Melbourne, Heidelberg and Hertfordshire, Kansas), active membership in, and leader of one, large international ongoing spectroscopic survey will be an asset to Uppsala University.

In conclusion, Dr Nordlander is an excellent scientist with an internationally proven track record, whose knowledge in the field of astrophysics is of strategic importance for Uppsala University.

Uppsala University proudly nominates **Thomas Nordlander** to the Wallenberg Academy Fellows Program 2023.

Anders Hagfeldt

Vice-Chancellor Uppsala University

## Nomination procedure

The Vice-Chancellor of Uppsala University was invited to nominate candidates to the Wallenberg Academy Fellows Program 2023. To ensure that the nominated candidates are of strategic importance for the Department, the Heads of Department were asked to nominate selected junior scientists. A total of 43 candidates were nominated, of whom 16 were selected to submit full proposals to the Wallenberg Academy Fellows Program. All nominations were evaluated and ranked within their respective Disciplinary Domains, i.e. Humanities and Social Sciences, Medicine and Pharmacy, and Science and Technology. The evaluation of the candidates was based on the proposed research programme, publications and research awards, the ability to obtain external funding from prestigious funding agencies, and mobility during the candidates' research career. The candidates' potential as research leader was also considered. This evaluation was combined with a discussion and assessment on how the nominee would strengthen and expand the prioritized research profiles of Uppsala University. The final decision was taken by the Vice-Chancellor. The Vice-Chancellor certifies that the budget requirements stipulated in the call will be fulfilled.