

Observational Astrophysics Program

(Division of Astronomy and Space Physics)

Staff (2024):

- Program professor (PAP): Nikolai Piskunov
- Faculty members: Oleg Kochukhov, Ulrike Heiter, Diane Feuillet, Erik Zackrisson, Andreas Korn (travelling)
- Ph.D. students: 5 (present: Linn Boldt-Christmas)
- Postdocs: 4 (present: Nikki Miller)
- Researchers (permanent): 2 (present: Eric Stempels, Division head)
- Research engineers: 0



Research focus

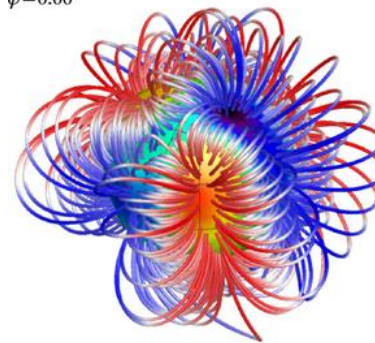
We use advanced observations to derive new knowledge about astronomical objects and the Universe as a whole. New astronomical instruments and theoretical models are the main methods to get the data and interpret it.

Main Research Areas		% of program	FTE Faculty	Type
1	Exoplanets and their host stars	40%	2	Basic
2	Mapping of the Milky Way	20%	1.5*	Basic
3	Galaxy formation and evolution	20%	1.5*	Basic
4	Stellar magnetism	20%	1	Basic

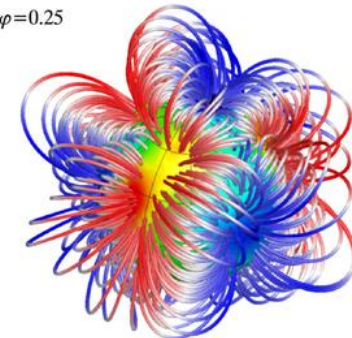
KoF24 report, Table 3.1



$\varphi=0.00$



$\varphi=0.25$



Observational Astrophysics



UPPSALA
UNIVERSITET

* Diane Feuillet was recruited after the KoF report was submitted

Key enablers for research

- Active, curious, motivated, talented people
 - We build our strategic plans around young people.
- Access to international infrastructures
 - ESO, ESA, and other facilities (e.g. Swedish Solar Telescope).
- External funding complemented by flexible internal support
 - Stimulating young researchers to apply for big grants (ERC, KAW, VR).
 - Financial overhead is a problem.
- National and international collaborations
 - Instrument development, big surveys and data analysis.



Program priorities

(KoF24 report summary, Chapters 8-10)

Prio 1 (program): World-leading positions in our speciality research areas

We should actively lead the areas where we have top expertise internationally.

Prio 2 (department): AI4Physics (departmental priority).

Educate researchers and students in AI-based technologies applied to our fields.

Prio 3 (faculty): Infrastructure commitments and science use of the ELT and other facilities.

- *Time scale 2017-2035, continuity is important.*
- *Recruite a scientist with interest in instrument development by 2026.*
- *Department has received the advisory group report.*

