Curriculum vitae — Peter Laursen

Updated October 27, 2021

Nationality: Danish

Date of birth: June 24, 1975
Spouse: Rikke Cederkvist
Children: Iris & Sigurd
(Paternity) leave: 2009 (4 months)

2017 (5 + 3 months)

2018 (3 months)

Email: pela@nbi.ku.dk Webpage: anisotropela.dk



Academic record

- 2020—now: Senior scientific and communication coordinator, Cosmic Dawn Center (DAWN)
- 2016–2020: Postdoc/fellow, astrophysics; ITA
- 2015–2016: System administrator / IT support; Dark Cosmology Centre (DARK)
- 2012–2015: Postdoc/fellow, astrophysics; DARK
- 2010–2012: Postdoc/fellow, astrophysics; Oskar Klein Center, Stockholm University
- 2007-2010: Ph.D. student, astrophysics; DARK (3 months at Excellence Cluster Universe, Garching)
- 2004–2006¹: M.Sc. student, astrophysics; DARK (average grade 13/13)
- 1999–2002: B.Sc. student, physics/mathematics; Roskilde University (RUC)

Research fields

- Lyman α radiative transfer
- Galaxy modeling
- Galaxy formation
- Galaxies at high and low redshifts
- Reionization

 $^{^1}$ As apparent from my academic record, there is a gap between my bachelor and master studies; in 2002 I was in an accident that costed me \sim a year of rehabilitation.

- Interstellar medium
- Intergalactic medium
- Emission from damped Lyα absorbers

IT qualifications

- · MacOS: installation, configuration, support, storage, backup, peripheral equipment, documentation
- Relevant admin software: DeployStudio, Open Directory, Workgroup Manager, FileMaker Pro
- High-perfomance computing: job scheduling (Slurm), OpenMP
- Other: Computer kiosk and security camera maintenance, disk installment, RAID administration
- Coding languages: Python, Fortran, IDL, shell scripting
- Web
 - o html, css (built the site anisotropela.dk)
 - WordPress (built the site cosmicdawn.dk)
- Published codes: see github.com/anisotropela

Academic activities

- Scientific Organizing Committees:
 - o 2021: DAWN Summit 2021
 - 2021: CIDER: The Cold ISM During the Epoch of Reionisation (a SAZERAC meeting)
 - o 2020: DAWN Summit 2020
 - \circ 2014: From local galaxies to the reionisation epoch: the Universe as seen in Lyman α (European Week of Astronomy and Space Science; EWASS)
- Organizing scientific article discussions
 - o 2020-: DAWN Journal Club (weekly)
 - o 2012-2015: DARK astro-ph (daily)
- Memberships
 - o 2021-: The European Astronomical Society (pending member)
 - o 2019–: The International Astronomical Union
 - 2012–: The Lyman Alpha Reference Sample (LARS) collaboration (PI's: Göran Östlin and Matthew Hayes, Stockholm University)
- Referee in scientific journals
 - 2007-: Astrophysical Journal, Monthly Notices of the Royal Astronomical Society, Astronomy
 & Astrophysics
- Examination committes
 - Nicolás Garavito's M.Sc. defence, Universidad de los Andes, Bogotá, Colombia
- Reporting scientific activities to the Danish National Research Foundation
 - Annual reports
 - o Regular contact with their outreach team

Publications

For a full list and summary, see anisotropela.dk/publications.

- Authored and co-authored refereed articles: 47 (2898 citations)
- First-author refereed articles: 7 (559 citations)
- *h*-index: 29

Awards and achievements

- 2019: Best Danish public outreach author on Forskerzonen (mentioned e.g. by the Danish National Research Foundation)
- 2016: ITA Fellowship grant for three years of independent research
- 2012: DARK Fellowship grant for three years of independent research
- 2011: First-author of Sweden's most cited paper in astrophysics (see popast.nu/2011/12/arets-basta-astronomiforskning-2011)
- 2010: Villum Kann Rasmussen Foundation grant for two years of independent research

Invited talks and seminars

- 2019: Lyman α radiation from galaxy formation, University College London, UK
- 2015: Chasing the highest-redshift galaxies in Ly α , University of Oslo
- 2012: Interpreting Lyman α radiation from young, dusty galaxies, Roskilde University
- 2011: Dust and Lyman α, Nordic Network of Astrophysics and Cosmology workshop, Corsica
- 2010: Interpreting the Lyα line, Nordic Astrophysics workshop, Visby
- 2010: Modeling Lyα emission from high-z galaxies, Lyα and reionization workshop, U. of Stockholm
- 2009: Lyman α radiative transfer in the high-redshift, dusty Universe, Lund Observatory

Teaching and supervision

See full teaching portfolio at anisotropela.dk/teaching.

- Main teacher
 - o "Classic papers in cosmology and astrophysics"
- Co-teacher, teaching assistant, and guest lecturer
 - o Multiple courses on astronomy, cosmology, and computational physics
- Supervision
 - o 2019: M.Sc. student Espen Hudme (subsidiary spv.), ITA, UiO
 - 2013: B.Sc. students Thejs Brinckmann and Mikkel Lindholmer (co-spv., DARK)

Public outreach

See full list of all outreach activities at anisotropela.dk/outreach.

Popular science writings

- Press releases and news stories on DAWN's science
- o Popular science articles (e.g. on videnskab.dk and ScienceNordic)

Media appearance

Regular interviews to radio, podcasts, tv, newspapers, and online science sites

Public talks

 Regular talks about galaxies, cosmology, and other astronomy-related topics to high school students, astronomy associations, and the general public

• Questions & answers

Answering questions about physics and astronomy at the Niels Bohr Institute's outreach site,
 my own Q&A column, and the popular website StackExchange.com

Miscellaneous

Tweeting about astronomy (@anisotropela). Posters, flyers, and articles for recruiting astronomy students. Public astronomy workshops (e.g. at the National Museum of Denmark). Public science debates. Science quizmaster. Astronomy art. Science slam.

Observational experience

Despite being mainly a numerical astrophysicist, I do have some observational experience:

- 2010–2021: Co-I on numerous successful proposals.
- 2009: PI on a program searching for Lyα emission from damped Lyα absorbers (4 nights at the NOT)
- Observed at the 2.5m Nordic Optical Telescope (25 nights), the IAC 80cm (6 nights), the Danish 1.5m (15 nights), the ESO 2.2m (8 nights).

Miscellaneous

- Languages: Fluent: Danish, English. Intermediate: Swedish, Norwegian. Basic: German, Spanish, signaugmented language
- Personal interests: Boxing, Bicycle racing, playing music.

Further references

Dr. Sijing Shen (3rd postdoc): sijing.shen@astro.uio.no

Prof. Johan P. U. Fynbo (2nd postdoc): jfynbo@nbi.ku.dk
Prof. Göran Östlin (1st postdoc): ostlin@astro.su.se
Dr. Mark Dijkstra (Ph.D. committee): astromark@gmail.com

Prof. Anja C. Andersen (Ph.D. spv.): anja@nbi.ku.dk