

Contact information

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Employment

Niels Bohr Institute, UCPH Marie Skłodowska-Curie Fellow	Sep 2023 – Aug 2025
Leibniz-Institut für Astrophysik Potsdam (AIP) Independent postdoc fellow in Cosmology and High-energy Astrophysics	Dec 2020 – July 2023
Leibniz-Institut für Astrophysik Potsdam (AIP) ERC-funded postdoc with Professor Christoph Pfrommer	Dec 2017 – Nov 2020

Education

Niels Bohr Institute, UCPH The PhD degree was awarded on November 6th, 2017.	Nov 2014 – Oct 2017
University of California, Berkeley Visiting PhD fellow at the Theoretical Astrophysics Center	Aug 2016 – Oct 2016
University of Copenhagen Master of Science in Physics GPA: 11.3/12. Thesis grade: 12/12	Feb 2012 – Sep 2014
University of Utrecht Erasmus exchange student	Sep 2012 – Feb 2013
The European Organization for Nuclear Research, CERN CERN summer student	Jun 2012 – Aug 2012
University of Copenhagen Bachelor of Science in Physics GPA: 10.9/12. Thesis grade: 12/12	Sep 2008 – Jan 2012

Organisational Skills

- Main organiser of the [6th ICM Theory and Computation Workshop](#), August 15-19, 2022
- Co-organiser of weekly astro-ph meeting at AIP, 2019-2022
- Organiser of weekly "Arepo/Cluster Knowledge Sharing" meeting at AIP, 2018-2019
- Local organiser of the [3rd ICM Theory and Computation Workshop](#), August 11-14, 2014

Programming skills and software

Languages: Python, C, C++, Fortran, Matlab and Mathematica.

Codes: AREPO (co-developer), ATHENA (self-modified local version) and ATHENA++ (user).

My own software: [PSECAS](#) (linear theory with pseudo-spectral methods), [SKELETOR](#) (a 2D hybrid-kinetic particle-in-cell code), [PLASMA-DISPERSION](#) (solver for gyrotronic distribution functions), [COMOVING_MHD_WAVES](#) (reference solutions for comoving MHD waves).

Selected talks

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| • 6th ICM Theory and Computation Workshop, NBI , Copenhagen | Aug 19, 2022 |
| • Virgo meeting talk II, Max Planck Institute for Astrophysics | Jul 12, 2022 |

- Virgo meeting talk I, **Max Planck Institute for Astrophysics** Jul 11, 2022
- Seminar talk, **Max Planck Institute for Astrophysics** Jan 17, 2020
- Santa Barbara Astro Lunch, **UCSB** Sep 25, 2019
- Multiscale Phenomena in Plasma Astrophysics, **KITP** Sep 9, 2019
- Physics of the Intra-Cluster Medium: Theory and Computation, Budapest Mar 5, 2019
- ICM Physics and Modeling, **MPA/ESO**, Garching Oct 10th, 2018
- AIP Colloquium, AIP, Potsdam Jul 26th, 2018
- PhD Prize talk, Annual Danish National Astronomy Meeting, Denmark May 3rd, 2018
- Astrophysics Seminars, **DAMTP**, University of Cambridge Nov 14th, 2016
- GAFD Seminars, University of California, **Santa Cruz** Sep 27th, 2016
- Theoretical Astrophysics Center, University of California, **Berkeley** Aug 17th, 2016
- Astrophysics Seminars, University of California, **Santa Barbara** Jun 3rd, 2015
- Workshop on turbulence, **Les Houches** Mar 25th, 2015
- 3rd ICM Theory and Computation Workshop, **NBI**, Copenhagen Aug 12, 2014
- Annual Danish National Astronomy Meeting, Denmark Jun 17th, 2014

Supervision

Leibniz-Institut für Astrophysik Potsdam (AIP)

- Advisor for the MSc project of Oliver Franke April 2019 – September 2020
- Advisor for the MSc project of Larissa Tevlin April 2022 – June 2023

Teaching

Guest lectures

- 1.5 hour lecture on galaxy formation at the University of Potsdam Jun 6, 2023
- 1 hour introduction to MHD instabilities at AIP Jun 24, 2020
- 25 min lecture in the Theoretical Astrophysics course at NBI Oct 23, 2017

Teaching assistant at the Niels Bohr Institute, University of Copenhagen

- Mathematics for physicists II Spring 2010 & 2011
- Electromagnetism and electronics Spring 2011
- Electromagnetism II Fall 2013
- Thermodynamics Spring 2013
- Theoretical Astrophysics Fall 2015
- Geophysical Fluid Dynamics Fall 2015

Utrecht University, the Netherlands

Sep 2012 – Dec 2012

- Co-supervised a project on Bose-Einstein condensates

Frederiksberg Gymnasium, Copenhagen

Aug 2011 – Dec 2011

- Taught physics and natural sciences at the upper secondary level

Grants

- Marie Skłodowska-Curie Individual Fellowship (230,000 €) 2023
- 17 mio. cpu-hours at SuperMUC-NG at LRZ (PI, equivalent to 1.5 mio. DKK) 2023
- 11 mio. cpu-hours at SuperMUC-NG at LRZ (PI, equivalent to 1 mio. DKK) 2020
- Oticon 10.000 DKK 2016
- Lørup Scholar Stipend 50.000 DKK 2014
- Julie Damms Studiefond, Oticon & Erasmus (three grants totaling 25.000 DKK) 2012

Professional and Academic Service

Referee for the Astrophysical Journal and MNRAS.