

+45 41580463  
stokholm@phys.au.dk  
a.strova.dk

# Amalie Stokholm

*Galactic Archaeology, asteroseismology, stellar modelling*

## Education

**PhD, Stellar Astrophysics Centre (SAC),** 2017–2021  
Department of Physics & Astronomy, Aarhus University, Denmark.

**MSc Astronomy,** 2016–2019  
Department of Physics & Astronomy, Aarhus University, Denmark.

**BSc Physics,** 2013–2016  
Department of Physics & Astronomy, Aarhus University, Denmark.  
Bachelor's project: *Interferometric and Asteroseismic Analysis of the Subgiant HD 181096*  
written under supervision of Dr. Víctor Silve Aguirre & Dr. Tim White.

**The Higher Technical Examination Programme (HTX),** 2010–2013  
Teknisk Gymnasium Viby, Aarhus Tech, Denmark.  
Specialization: Mathematics / Physics / History of Ideas / Chemistry

## Publications

An up-to-date list of publications can be found [at my ADS library](#).

## Related Experience

**Guest researcher,** 2020  
Max-Planck-Institut für Astronomie (MPIA), Germany.  
Research stay at MPIA working with Dr. Coryn Bailer-Jones and his group.  
Stay got interrupted due to the COVID-19 crisis.

**BASTA, BAYesian STellar Algorithm,** 2016–  
Core team member of the development team behind BASTA, a grid-based stellar modelling approach written in Python 3 for inference of stellar parameters.

**Space Astrometry for Astrophysics,** 2019  
International School of Space Science, Italy.  
Summer school about understanding the scientific construction of the *Gaia* catalogue and its current and future scientific potential in synergy with the large ground-based spectro-photometric surveys

**Astrostatistics and Astroinformatics XIV,** 2018  
Pennsylvania State University, USA.  
Summer school about statistics and scientific computing within the field of astrophysics

**CHARA Array, The Center for High Angular Resolution Astronomy Array,** 2016  
Mount Wilson, USA.  
Research trip to the CHARA Array for 10 nights of observations. Experience with the graphical interface for the Precision Astronomical Visual Observations (PAVO) beam combiner and the PAVO data analysis pipeline.

**EuroPython 2016,** 2016  
Bilbao, Spain.  
Attendee at the EuroPython conference

**Introduction to Complex Systems,** 2015  
Faculty of Science, Utrecht University, the Netherlands.  
Summer School in August about emergence, robustness, and predicability of patterns.  
Funded by a Professor Jens Lindhards Forskningslegat.

## Teaching experience

- PhD student, Stellar Astrophysics Centre (SAC),** **2017–**  
Department of Physics & Astronomy, Aarhus University, Denmark.  
Alongside my PhD research projects, I followed courses at the Master/PhD level, and I worked as a teaching assistant at the institute in the following courses:
- Relativity & Astrophysics, autumn 2017, BSc course (10 ECTS), 1 unit
  - Galaxies & Cosmology, spring 2018, BSc course (10 ECTS), 1 unit
  - Relativity & Astrophysics, autumn 2018, BSc course (10 ECTS), 1 unit + administrative work
  - Relativity & Astrophysics, autumn 2019, BSc course (10 ECTS), 2 units
- Teacher,** **2016–2017**  
Egaa Gymnasium, Denmark.  
Upper-secondary school teacher in the course *Astronomy C*
- Coordinator of Astronomy Internships for ninth graders,** **2016–2017**  
Department of Physics & Astronomy, Aarhus University, Denmark.  
Organizer and teacher of a semi-annual week-long internship on how to study and work in the fields of astronomy and astrophysics aimed at students in the last years of primary school
- Interim Teacher,** **2015**  
Teknisk Gymnasium Viby, Aarhus Tech, Denmark.  
Interim teacher in Physics. Week 8 2015 through week 17 2015
- Homework tutor,** **2012–2013**  
Teknisk Gymnasium Viby, Aarhus Tech, Denmark.  
Organizer of and tutor in the homework café. August 2012 through June 2013

## Programming languages

Proficient: Python, Bash, MATLAB, ADQL, SQL, Wordpress, Jekyll  
Familiar with: C, IDL, LabVIEW

## Committees & collaborations

- PLATO Science Consortium & PLATO Science Management,** **2019–**  
Member of PSM Work Package 125 (Determination of Stellar Parameters).
- Equity Committee,** **2017–2020**  
Department of Physics & Astronomy, Aarhus University.  
Member
- TESS Asteroseismic Science Consortium (TASC).** **2017–**  
Member
- Instrument Center for Danish Astrophysics (IDA).** **2017–2018**  
Member of the board, Chair of Working Group 7, and member of 4 additional Working Groups
- Kepler Asteroseismic Science Consortium (KASC).** **2017–**  
Member