# Håvard Tveit Ihle

\$ 40490661 ⊠ htihle@gmail.com Date of Birth: June 10, 1987

I'm an astrophysicist focused on data analysis for Cosmological experiments. I'm leading the development of the end-to-end data analysis pipeline for the COMAP experiment, from raw telescope data to constraints on astrophysical parameters. I'm also working on data analysis for cosmic microwave background experiments within the Cosmoglobe collaboration. In addition, I enjoy teaching and supervising students.

# Experience

## Research

- Spring 2021– **Postdoctoral Fellow in Cosmology**, *Institute of Theoretical Astrophysics, University of Oslo (UiO)*.
- Summer 2014 Research assistant, *UiO*.

  Implementing a wavelet-based method to detect point sources in the Planck CMB-data.

#### Supervision

- 2021- PhD supervisor, UiO, Currently supervising two PhD students in Cosmology.
- 2019-2021 **Master thesis supervisor**, *UiO*, Supervising masters students in Cosmology. One master student finished summer 2020. Three students finished summer 2021.

## Teaching

- 2021–2022 Lecturer, *UiO*, Cosmological Component Separation (AST9240).
- Spring 2018 Lecturer, UiO, Cosmology 2 (AST5220/9420).
- 2016–2018 Group teacher in Astronomy, University of Oslo, Introduction to Astrophysics (AST 2000).
- 2013–2015 Lab teacher in computational physics, *UiO*, Computational Physics (FYS 3150/4150).
- 2013–2016 **Group teacher in introductory physics**, *UiO*, Physics- the foundation of natural sciences and medicine (FYS 1000).
- Summer 2015 **Student project developer**, *UiO*, (AST 2000).
  - Spring 2015 Lab teacher in computational physics, *UiO*, Computational Physics 2 (FYS 4411/9411).

#### Education

- 2016–2021 **PhD in Cosmology**, *Institute of Theoretical Astrophysics, UiO*, "Bayesian Data Analysis for Intensity Mapping and CMB Experiments".
- 2013–2016 **Master in Astronomy**, *Institute of Theoretical Astrophysics, UiO*, "Late Kinetic Decoupling of Dark Matter".

#### Awards

2022 His Majesty The King's gold medal for best doctoral thesis in the Faculty of Mathematics and Natural Sciences at the University of Oslo in 2021.

# **Publications**

As quantified by NASA/ADS, I have published a total of 33 papers in the field of Cosmology as of Sept. 2022, resulting in a total of 370 citations and an h-index of 11.

#### Skills

Programming (python, fortran, C++), data visualization (matplotlib), statistical methods/modeling/inference, bayesian data analysis, machine learning (pytorch), high performance computing (MPI, openmp, numpy, scipy).