

# DR. NATALIA LAHÉN

ORCID iD: 0000-0003-2166-1935

Address: Max Planck Institute for Astrophysics  
Karl-Schwarzschild-Str. 1  
D-85748 Garching  
Germany

Phone: +358 40 411 9629

e-mail: nlahen@mpa-garching.mpg.de

## Current position

**1 Oct 2020 – 30 Sep 2023:** Post-doctoral Fellow, Max Planck Institute for Astrophysics (MPA), Garching bei München, Germany

## Education (Department of Physics, University of Helsinki, Finland)

**June 2015 – Sep 2020** Doctor of Philosophy, Doctoral programme in Particle Physics and Universe Sciences (PAPU), major: Astronomy, supervisor: Prof. Peter H. Johansson  
**June 2014 – May 2015** Master of Science, major: Astronomy  
**Sep 2011 – June 2014** Bachelor of Science, major: Astronomy

## Previous work experience

**June 2015 – Sep 2020:** Doctoral Candidate, Department of Physics, University of Helsinki, Finland  
**Sep 2014 – Apr 2015:** Research assistant (50% part-time), Theoretical Extragalactic Research Group, Department of Physics, University of Helsinki, Finland  
**May 2014 – Aug 2014:** Summer trainee, Theoretical Extragalactic Research Group at the Department of Physics, University of Helsinki, Finland  
**May 2013 – Aug 2013:** Summer trainee, Institute of Seismology, Finland

## Funding track record

Computing time at Supermuc-NG Tier-0 supercomputer hosted by the Leibniz Supercomputing Centre:

**2021:** Co-PI in project LYRA (pn73we), 39.4 million CPUh (PI Gutcke)

**2019:** Co-PI in project GRIFFIN (pn72bu), 30.6 million CPUh (PI Steinwandel)

Grants:

**2015, 2016, 2017:** Received and twice renewed €24 000 per annum for a total of €72 000 from Jenny and Antti Wihuri foundation for PhD Thesis research

## Selected publications

**Lahén N., Naab T., Kauffmann, G.,** *A panchromatic view of star cluster formation in a simulated dwarf galaxy starburst*, submitted to Monthly Notices of the Royal Astronomical Society, arXiv: 2111.14875

**Lahén N., Naab T., Johansson, P. H., Elmegreen, B., Hu, C.-Y., Walch, S.,** *Structure and Rotation of Young Massive Star Clusters in a Simulated Dwarf Starburst*, Astrophysical Journal, 2020, 904, 71

**Lahén N., Naab T., Johansson, P. H., Elmegreen, B., Hu, C.-Y., Walch, S., Steinwandel, U. P., Moster, B. P.,** *The GRIFFIN Project—Formation of Star Clusters with Individual Massive Stars in a Simulated Dwarf Galaxy Starburst*, Astrophysical Journal, 2020, 891, 2

**Lahén N., Naab T., Johansson, P. H., Elmegreen, B., Hu, C.-Y., Walch, S.,** *The Formation of Low-metallicity Globular Clusters in Dwarf Galaxy Mergers*, Astrophysical Journal Letters, 2019, 879, L18

**Lahén N., Johansson, P. H., Rantala A., Naab T., Frigo M.,** *The fate of the Antennae galaxies*, Monthly Notices of the Royal Astronomical Society, 2018, 475, 3934

## Research highlights

**Haufenweise Methusalem-Sterne**, Bild der Wissenschaft 03/2022, by Thorsten Dambeck

[How do star clusters form in dwarf galaxies?](#) by N. Lahén, J. M. Hislop, T. Naab, and G. Kauffmann

[Globular cluster formation deciphered](#) by T. Naab

[Featured Image: Growing Globular Clusters from Mergers](#) by S. Kohler

## Prices and other academic activities

- 2022:** €1 000 for The Väisälä prize for outstanding PhD Thesis in Astronomy awarded by the Finnish Astronomical Society
- 2020:** €2 000 award for “The conference organizer of the year” at the University of Helsinki, for organizing the “Linking the Milky Way and Nearby Galaxies” conference
- 2019:** LOC member of conference “Linking the Milky Way and Nearby Galaxies”, 3 – 7 June at University of Helsinki, Finland
- 2018 – present:** Reviewer for The Astrophysical Journal and The Monthly Notices of the Royal Astronomical Society
- 2021 – present:** Member of the International Astronomical Society
- 2018 – present:** Member of the Finnish Astronomical Society and the European Astronomical Society.
- 2018 – 2021:** Auditor of the Finnish Astronomical Society

## Selected conference presentations and seminars

- 2022:** Invited talk, *Toward resolved formation of globular clusters in galactic-scale hydrodynamical simulations*, at the Finnish Astronomer’s Days 2022 in Jyväskylä, Finland
- 2021:** Seminar talk, *Towards realistic globular cluster formation in simulated dwarf starbursts*, MPA institute seminar
- 2019:** Contributed talk, *The formation of low metallicity stellar clusters in dwarf galaxy mergers*, Linking the Milky Way and Nearby Galaxies, Helsinki, Finland
- 2018:** Contributed talk, *Evolution and detection of LSB features in a major merger*, National Astronomer’s Days in Kuusamo, Finland
- 2017:** Contributed talk, *The fate of the Antennae galaxies*, Frontiers of Astrophysical Modeling held in Leuven, Belgium
- 2016:** Contributed talk, *Simulating the metallicity of the Antennae galaxies*, National Astronomer’s Days, Tampere, Finland
- Contributed talk, *The fate of the Antennae galaxies*, Annual Tuorla-Tartu meeting, Turku, Finland
- Seminar talk, *The fate of the Antennae galaxies*, University of St Andrews, Scotland

## Teaching and institutional responsibilities

Co-supervision of PhD candidates at MPA, Garching, Germany

Assistant teacher on Bachelor level Astronomy courses at the Department of Physics, University of Helsinki:

**Fall semester in 2015, 2017, and 2019:** Galaxies and Cosmology

**Fall semester in 2016 and 2018:** Structure of the Milky Way

**Half of fall semester in 2015:** Fundamental Astronomy 2

**Half of spring semester in 2014:** Fundamental Astronomy 1

**2014 – 2015:** Student member of the Department Council of the Department of Physics and the Working Group for Astronomy Teaching Development at the University of Helsinki, Finland