

Curriculum Vitae

Jannik Hofestädt

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Education and Positions

- 03/2017 - present **Postdoctoral researcher** at Erlangen Centre for Astroparticle Physics (ECAP), University of Erlangen-Nürnberg, Germany
Field of research: neutrino physics with KM3NeT/ORCA and Super-ORCA
- 10/2012 - 02/2017 **Ph.D. in Physics, highest distinction ‘*summa cum laude*’,** University of Erlangen-Nürnberg
Thesis: “*Measuring the neutrino mass hierarchy with the future KM3NeT/ORCA detector*”, advisors: Prof. Dr. Gisela Anton and Prof. Dr. Uli Katz
- 10/2009 - 04/2012 **M.Sc. in Physics**, average grade 1.2 (among top 10%), University of Göttingen, Germany
Thesis: “*Muon triggers for Searches for Supersymmetry in Multi-Lepton Final States with the ATLAS Detector*”, advisors: Prof. Dr. Arnulf Quadt and Dr. Carsten Hensel
- 09/2010 - 01/2011 **Exchange student (Erasmus)**, University of Amsterdam, Netherlands
Research project at NIKHEF: “*Studies for low-energy muon track reconstruction with the ANTARES detector*”, advisor: Dr. Dorothea Samtleben
- 07/2010 - 09/2010 Summer student at Deutsches Elektronen-Synchrotron (DESY), Hamburg, Germany
Research project: “*Study of different reference axes for secondary vertexing in DIS at ZEUS*”
- 10/2006 - 10/2009 **B.Sc. in Physics**, University of Göttingen

Responsibilities in Research and University

- 05/2019 - present **Representative of early-career scientists** in Institute Board of KM3NeT Collaboration
- 10/2018 - present **Publication committee member** of ANTARES Collaboration
- 04/2018 - present **Data analysis coordinator** for first KM3NeT/ORCA data
- 02/2018 - present **Editorial board member** for several ANTARES and KM3NeT Collaboration publications
- 01/2015 - 01/2017 **Employee representative** in ECAP management, University of Erlangen-Nürnberg
- 10/2013 - 04/2017 **Deputy employee representative** in Institute of Physics management, University of Erlangen-Nürnberg

Prizes

- 10/2019 **Gerda-Weller-Prize** for an outstanding dissertation in physics, awarded every four years, Department of Physics, University of Erlangen-Nürnberg
- 03/2018 Finalist (4 final nominees) for Dissertation Prize of German Physical Society (DPG) in ‘Matter and Cosmos’ section

- 10/2017 **Dissertation Prize** from the Global Neutrino Network of neutrino telescopes (GNN; ~700 international scientists)
- 10/2017 **Ohm-Prize** for an excellent dissertation in physics, Department of Physics, University of Erlangen-Nürnberg
- 03/2017 **First best poster prize**, International Workshop on Neutrino Telescopes (NeuTel)

Teaching Experience

- 04/2018 **Substitute lecturing** for 'Advanced Experimental Physics: Particle and Astroparticle Physics' course at University of Erlangen-Nürnberg
- 2018 - present **Co-supervision of Ph.D. students** in their day-to-day work (3 students)
- 2013 - present **Co-supervision of bachelor and master students** in their day-to-day work (~15 students)
- 2013 - present **Tutorials and lab courses in advanced Particle Physics for master students** at University of Erlangen-Nürnberg:
conducting and tutoring exercises for 'Advanced Experimental Physics: Particle and Astroparticle Physics', supervising and grading students in experiment 'Analysis of Z^0 decays with OPAL'
- 2009 - present **Tutorials and lab courses for undergraduate students** at University of Göttingen and University of Erlangen-Nürnberg:
conducting and tutoring exercises for 'Physics 5' (Nuclear and Particle Physics), 'Physics 1 & 2' (Mechanics, Thermodynamics and Electrodynamics), 'Laboratory Course 2' (experiment 'radioactivity' and 'black-body radiation')

Outreach Activities

- 2013 - present Explaining physics to pupils and the general public in events like:
Long Night of Sciences: presentation of science with experiments/models
Girls and Technology & Youth and Technology: one-day laboratory visits for pupils
Market Day of Knowledge: science expeditions on central marketplace in Erlangen
- 2012 - present *Particle Physics Masterclasses* in the framework 'Netzwerk Teilchenwelt' one-day hands-on events at schools (14- to 19-year old students) to give insight in topics and methods of particle physics research
- 2009 Physics show '*Zauberhafte Physik*', University of Göttingen
Developed and performed educational experiments for children

Selected Talks and Seminars

- 07/2019 *Atmospheric Neutrinos Detected with the First KM3NeT Detection Units of ARCA and ORCA*, contributed talk at the **International Cosmic Ray Conference (ICRC)**, Madison, USA
- 04/2019 *Physics with KM3NeT/ORCA*, invited talk at the **international workshop on Prospects of Neutrino Physics**, Kavli IPMU, Kashiwa, Japan
- 10/2018 *Summary of Parallel Sessions: Particle Physics with Neutrino Telescopes*, invited talk at the **Very Large Volume Neutrino Telescopes (VLVnT) conference**, Dubna, Russia
- 10/2018 *Computing in the KM3NeT Research Infrastructure*, contributed talk at the **Very Large Volume Neutrino Telescopes (VLVnT) conference**, Dubna, Russia

- 08/2018 *ANTARES and KM3NeT: Status and perspectives*, invited talk at the **Astroparticle Physics in Germany workshop**, Mainz, Germany
- 06/2018 *KM3NeT/Super-ORCA: Measuring the leptonic CP-phase with atmospheric neutrinos*, contributed talk at the **Advanced Workshop on Physics of Atmospheric Neutrinos (PANE)**, Trieste, Italy
- 03/2018 *Measuring the neutrino mass hierarchy with the future KM3NeT/ORCA detector in the deep sea*, invited talk at the **Dissertation Prize Symposium** of 'Matter and Cosmos' section at the spring meeting of the **German physical society (DPG)**, Würzburg, Germany
- 07/2017 *Measuring the neutrino mass hierarchy with KM3NeT/ORCA*, contributed talk at the **Topics in Astroparticle and Underground Physics (TAUP) conference**, Sudbury, Canada
- 06/2017 *KM3NeT/ORCA: neutrino physics in the deep Mediterranean Sea*, invited seminar talk at the **Particle Physics Seminar at University of Bonn**, Bonn, Germany
- 09/2016 *Prospects for measuring the neutrino mass hierarchy with KM3NeT/ORCA*, contributed talk at the **European Cosmic Ray Symposium (ECRS) conference**, Turin, Italy

Selected Posters

- 07/2019 *Super-ORCA: Measuring the leptonic CP-phase with Atmospheric Neutrinos and Beam Neutrinos*, **International Cosmic Ray Conference (ICRC)**, Madison, USA
- 06/2018 *KM3NeT/Super-ORCA: Measuring the leptonic CP-phase with atmospheric neutrinos*, **International Conference on Neutrino Physics and Astrophysics (Neutrino)**, Heidelberg, Germany
- 03/2017 *Event reconstruction in the KM3NeT/ORCA detector*, **International Workshop on Neutrino Telescopes (NeuTel)**, Venice, Italy
- 07/2015 *Studies of intrinsic resolution to low energy electron and muon neutrino events with neutrino telescopes and Reconstruction of shower-like neutrino events with the KM3NeT/ORCA detector*, **International Cosmic Ray Conference (ICRC)**, The Hague, Netherlands
- 07/2014 *ORCA: a feasibility study of measuring the neutrino mass hierarchy with an underwater Cherenkov detector within the KM3NeT framework*, **International Conference on High Energy Physics (ICHEP)**, Valencia, Spain