

CURRICULUM VITAE

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Ludwig-Maximilians University (LMU) Munich, Faculty of Physics
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EDUCATION AND ACADEMIC APPOINTMENTS

LMU Munich , Physicist, faculty member (Akademischer Rat auf Lebenszeit)	since 2022
LMU Munich , Research scientist (Akademischer Rat auf Zeit)	2018 — 2022
Argonne National Laboratory , Postdoctoral researcher	2016 & 2017
KICP University of Chicago , Associate fellow	
LMU Munich , Postdoctoral researcher	2015
LMU Munich , PhD in Astrophysics, <i>magna cum laude</i> Thesis: <i>Galaxy Cluster Cosmology</i> , Advisor: Prof. Dr. J. Mohr	2011 — 2015
LMU Munich , Diploma in Physics, <i>with highest honors</i> Thesis: <i>The Dark Higgs Portal</i> , Advisor: Prof. Dr. S. Hofmann	2005 — 2011
ENSPG Grenoble (ERASMUS exchange student)	2007/2008

RESEARCH INTERESTS

- Analysis of cosmological survey data (South Pole Telescope, Dark Energy Survey)
- Preparation and forecasting for upcoming surveys (eROSITA, Rubin/LSST, Euclid, CMB-S4)
- Galaxy cluster cosmology and astrophysics
- Structure formation and numerical cosmological N -body and hydrodynamic simulations
- Statistics and Machine Learning: Bayesian parameter inference, Gaussian process interpolation for emulators, neural networks for source finding

MAJOR COLLABORATIONS

Euclid consortium	since 2020
Next-generation optical/NIR space-based cosmological survey	
CMB-S4 collaboration	since 2016
Next-generation millimeter-wave cosmological survey	
Vera C. Rubin/LSST Dark Energy Science Collaboration (DESC)	since 2016
Next-generation optical cosmological survey	
Dark Energy Survey collaboration	since 2013
State-of-the-art optical cosmological survey	
South Pole Telescope collaboration	since 2011
State-of-the-art millimeter-wave cosmological survey	
eROSITA DE consortium	2012 — 2015; 2018 — 2022
Leading X-ray cosmological survey (early data analysis)	

MANAGEMENT AND LEADERSHIP ACTIVITIES

Co-convener of the DES Clusters working group (Dark Energy Survey)	since 2020
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Diversity, Equity, Inclusion committee (Dark Energy Survey)	2021 — 2023
Co-lead of the DES cluster cosmology analysis team (Dark Energy Survey)	2019 & 2020
Co-lead of the DESxCMB cluster analysis team (Dark Energy Survey)	2019 — 2021

OTHER ACTIVITIES

Lead organizer for international workshop at MIAPbP (Garching, Germany) https://www.munich-iapp.de/cosmology22	2022
ORIGINS—Cluster of Excellence https://www.origins-cluster.de/en/ Large-Scale Structure, Dark Energy, Dark Matter	PI since 2018
Part of OC of Munich-area <i>Code Coffee</i> Sessions	2019
Part of OC of Argonne HEP <i>Young Scientist Symposium Series</i>	2017
Journal Referee (ApJ, A&A, JCAP, MNRAS)	since 2015

TALKS AND PRESENTATIONS

Invited Talks: Conferences & Colloquia

Pascal Institute of the Paris-Saclay University, France <i>AstroParticle Symposium 2022</i>	2022
Flatiron Institute, New York City, USA <i>Sunyaev-Zel'dovich Science in the 2020s: Connecting Theory, Simulations, and Observations</i>	2022
ESA (ESAC) Madrid, Spain <i>A Multi-Wavelength View of Galaxy Clusters</i>	2021
LSST-Athena synergies workshop	2021
Trieste, Italy <i>Dissecting Cluster Cosmology</i> (postponed due to Covid-19 pandemic)	2020
Sexten CfA, Italy <i>Hot Topics in Astrophysics II</i> (cancelled due to Covid-19 pandemic)	2020
University Observatory Munich (USM/LMU), Germany <i>Institute Colloquium</i>	2020
APC Paris, France <i>Towards Coordination of the European CMB program</i>	2019
Sexten CfA, Italy <i>Tracing Cosmic Evolution with Galaxy Clusters</i>	2019
University of Sussex, UK <i>Astronomy Colloquium</i>	2019
ICTS Bangalore, India <i>Cosmology — The Next Decade</i>	2019
Jena University, Germany <i>German Long Wavelength Consortium Annual Assembly</i>	2018
Kavli Institute for Cosmology, Cambridge, UK <i>Consistency of cosmological datasets: Evidence for new physics?</i>	2018
Max Planck Institute for Astrophysics, Germany <i>Return of de Sitter II</i>	2013

Select Invited Talks: Seminars

Inter-institutional Laboratory of e-Astronomy (LIneA), Rio de Janeiro, Brazil <i>Webinar</i>	2022
Institut d'Astrophysique Spatiale, Orsay, France <i>Cosmo-seminar</i>	2022
University of Trieste, Italy <i>Astrophysics Seminar</i>	2020
MIT, Cambridge, USA <i>Astronomy Lunch talk</i>	2020
University of Michigan, Ann Arbor, USA <i>Astronomy Seminar</i>	2017
CfA Harvard, Cambridge, USA <i>Galaxies & Cosmology Seminar</i>	2016
Fermilab, Batavia, USA <i>Astrophysics Seminar</i>	2016
Max Planck Institute for Astrophysics (MPA), Garching, Germany <i>High Energy seminar</i>	2015
Max Planck Institute for Extraterrestrial Physics (MPE), Garching, Germany <i>Optical and Interpretative Astronomy (OPINAS) seminar</i>	2015

Select Contributed Talks: Conferences and Workshops

<i>mm Universe 2023</i> , Grenoble, France	2023
Neutrino Cosmology Day, Garching, Germany	2022
<i>mm Universe @ NIKA2</i> , Rome, Italy (remote)	2021
<i>KICC 10th Anniversary Symposium</i> , Cambridge, UK	2019
<i>CMB in Germany</i> , MPA Garching, Germany	2018
<i>Clusters 2017</i> , Santander, Spain	2017
<i>COSMO-16</i> , Ann Arbor, USA	2016
<i>SnowCluster</i> , Snowbird Utah, USA	2015
<i>Cosmology with galaxy clusters in the XXI century</i> , Madrid, Spain	2014

PUBLIC OUTREACH

Adler Planetarium, Chicago, www.adlerplanetarium.org <i>Astronomy Conversations</i>	throughout 2017
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