Sebastian Bocquet

CURRICULUM VITAE

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Ludwig-Maximilians University (LMU) Munich, Faculty of Physics Universitäts-Sternwarte, Scheinerstr. 1, 81679 München, Germany

EDUCATION AND ACADEMIC APPOINTMENTS

LMU Munich, Physicist, faculty member (Akademischer Rat auf Lebenszei	t) July 2022
LMU Munich, Research scientist (Akademischer Rat auf Zeit)	Jan 2018 — Jun 2022
Argonne National Laboratory, Postdoctoral researcher KICP University of Chicago, Associate fellow	2016 — 2018
LMU Munich, Postdoctoral researcher	July 2015 — Dec 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, with highest honors Thesis: The Dark Higgs Portal, 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 Next-generation optical/NIR space-based cosmological survey	Since 2020
CMB-S4 collaboration Next-generation millimeter-wave cosmological survey	since 2016
Vera C. Rubin/LSST Dark Energy Science Collaboration (DESC) Next-generation optical cosmological survey	since 2016
Dark Energy Survey collaboration State-of-the-art optical cosmological survey	since 2013
eROSITA DE consortium Leading X-ray cosmological survey (early data analysis)	2012 — 2015; 2018 — present
South Pole Telescope collaboration State-of-the-art millimeter-wave cosmological survey	since 2011

MANAGEMENT AND LEADERSHIP ACTIVITIES

Diversity, Equity, Inclusion committee (Dark Energy Survey)

2021 - 2023

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Co-convener of the DES Clusters working group (Dark Energy Survey)	2020-2024
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	since 2018
Part of OC of Munich-area Code Coffee Sessions	2019
Part of OC of Argonne HEP Young Scientist Symposium Series	2017
Journal Referee (ApJ, A&A, MNRAS)	since 2015
TALKS AND PRESENTATIONS	
Invited Talks: Conferences & Colloquia	
Noirmoutier, France Exploring the Dark Side of the Universe — Tools	2024
Flatiron Institute, New York City, USA 2022 Sunyaev-Zel'dovich Science in the 2020s: Connecting Theory, Simulations, and Observations	
ESA (ESAC) Madrid, Spain A Multi-Wavelength View of Galaxy Clusters	2021
LSST-Athena synergies workshop	2021
Trieste, Italy Dissecting Cluster Cosmology (postponed due to Covid-19 pandemic)	2020
Sexten CfA, Italy Hot Topics in Astrophysics II (cancelled due to Covid-19 pandemic)	2020
University Observatory Munich (USM/LMU), Germany Institute Colloquium	2020
APC Paris, France Towards Coordination of the European CMB program	2019
Sexten CfA, Italy Tracing Cosmic Evolution with Galaxy Clusters	2019
University of Sussex, UK Astronomy Colloquium	2019
ICTS Bangalore, India Cosmology — The Next Decade	2019
Jena University, Germany German Long Wavelength Consortium Annual Assembly	2018
Kavli Institute for Cosmology, Cambridge, UK Consistency of cosmological datasets: Evidence for new physics?	2018
Max Planck Institute for Astrophysics, Germany Return of de Sitter II	2013

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Select Invited Talks: Seminars Universität Innsbruck, Austria 2024 Joint Institute Seminar University of Cambridge, UK 2023 Cosmology Lunch Institut d'Astrophysique Spatiale, Orsay, France 2022 Cosmo-seminar 2020 University of Trieste, Italy Astrophysics Seminar 2020 MIT, Cambridge, USA Astronomy Lunch talk University of Michigan, Ann Arbor, USA 2017 Astronomy Seminar CfA Harvard, Cambridge, USA 2016 Galaxies & Cosmology Seminar Fermilab, Batavia, USA 2016 Astrophysics Seminar 2015 Max Planck Institute for Astrophysics (MPA), Garching, Germany High Energy seminar Max Planck Institute for Extraterrestrial Physics (MPE), Garching, Germany 2015 Optical and Interpretative Astronomy (OPINAS) seminar **Select Contributed Talks: Conferences and Workshops** Observing the mm Universe, Grenoble, France 2023 Neutrino Cosmology Day, Garching, Germany 2022 mm Universe @ NIKA2, Rome, Italy (remote) 2021 KICC 10th Anniversary Symposium, Cambridge, UK 2019 CMB in Germany, MPA Garching, Germany 2018 Clusters 2017, Santander, Spain 2017 COSMO-16, Ann Arbor, USA 2016 SnowCluster, Snowbird Utah, USA 2015 Cosmology with galaxy clusters in the XXI century, Madrid, Spain 2014 **PUBLIC OUTREACH** Adler Planetarium, Chicago, www.adlerplanetarium.org throughout 2017

Astronomy Conversations