Sebastian Bocquet

CURRICULUM VITAE

sebastian.bocquet@physik.lmu.de

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, <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 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)

Since 2021

Curriculum Vitae – Sebastian Bocquet

Co-convener of the DES Clusters working group (Dark Energy Survey)	Since 2020
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	
Flatiron Institute, New York City, USA Sunyaev-Zel'dovich Science in the 2020s: Connecting Theory, Simulations, and Ol	2022 bservations
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

Curriculum Vitae - Sebastian Bocquet

Select Invited Talks: Seminars

Astronomy Conversations

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