## 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**, Research scientist/academic staff (Akademischer Rat auf Zeit) Jan 2018 — present

Argonne National Laboratory, Postdoctoral researcher

2016 - 2018

KICP University of Chicago, Associate fellow

LMU Munich, Postdoctoral researcher

July 2015 — Dec 2015

**LMU Munich**, PhD in Astrophysics, *magna cum laude* 

2011 - 2015

Thesis: Galaxy Cluster Cosmology, Advisor: Prof. Dr. J. Mohr

**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**

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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

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)	

## Since 2019

OTHER ACTIVITIES	
Lead proposer for international workshop at MIAPP (Garching, Germany) <a href="https://www.munich-iapp.de/cosmology22">https://www.munich-iapp.de/cosmology22</a>	2022
ORIGINS—Cluster of Excellence <a href="https://www.origins-cluster.de/en/">https://www.origins-cluster.de/en/</a> 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	
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
Select Invited Talks: Seminars	
University of Trieste, Italy Astrophysics Seminar	2020
MIT, Cambridge, USA Astronomy Lunch talk	2020

## Curriculum Vitae – Sebastian Bocquet

Adler Planetarium, Chicago, <u>www.adlerplanetarium.org</u> Astronomy Conversations	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
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