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 |
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| 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 |
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| Co-lead of the DES cluster cosmology analysis team (Dark Energy Survey) | 2019/2020 |

| Co-lead of the DESxCMB | cluster | analysis | team | (Dark En | ergy | Survey) |
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2019-2021

| OTHER ACTIVITIE |
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| OTHER ACTIVITIES | |
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| Lead proposer for international workshop at MIAPP (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 | |
| 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 |
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Curriculum Vitae – Sebastian Bocquet

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