# **LUCAS PORTH**

 $\square +49 \ 162 \ 950 \ 2083 \qquad \square$ l.porth@sussex.ac.uk  $\square$  lporth93

#### RESEARCH INTEREST

Constraining cosmological parameters and testing theories via probes of Weak Gravitational Lensing and Large-Scale-Structure. I am interested in the theoretical, statistical and Bayesian perspective of this challenge.

#### **EDUCATION**

## University of Sussex, Brighton

since September 2017

PhD candidate in Physics

Thesis topic: Combining cosmic shear and large-scale structure data to constrain

the acceleration of the Universe (advisors: R. E. Smith, J. Loveday)

## Ludwig-Maximilians-Universität München, Munich

July 2017

M.Sc. in Physics

Thesis: Nonlinear structure formation and the Halo Model (advisor: J. Weller)

Overall Grade: 1.3 (GPA 3.7)

## Ludwig-Maximilians-Universität München, Munich

July 2014

B.Sc. in Physics and Astrophysics

Thesis: The Kerr-Metric: A comprehensive analysis (advisor: H. Lesch)

Overall Grade: 1.3 (GPA 3.7)

## Gymnasium Gröbenzell, Gröbenzell

July 2011

German Abitur (IB equivalent)

Overall Grade: 1.3 (A)

### TALKS AND POSTER PRESENTATIONS

Euclid Weak Lensing		
Working Group	11/2020	Talk on Fast Estimation of Aperture Mass Statistics
University of Sussex	11/2020	Talk on Fast Estimation of Aperture Mass Statistics
South Coast Cosmology	10/2020	Talk on Fast Estimation of Aperture Mass Statistics
University of Sussex	02/2020	Talk on Bayesian Mass Reconstruction
University College London	07/2018	Poster Presentation on Weak Gravitational Lensing
University of Sussex	05/2018	Talk on Weak Gravitational Lensing

### SELECTED CONFERENCES/METTINGS ATTENDED

University of Portsmouth University Of Oxford	2020 2018	South Coast Cosmology Statistical Challenges for Large-Scale Structure in the era of LSST
University of Valencia	2018	Statistical Challenges in 21st Century Cosmology
Royal Observatory Edinburgh	2018	LSST sprint week

# TEACHING EXPERIENCE

AT work at Sussex	2017/2018	Thermal and Statistical Physics
	2018/2019	Properties of Matter
	2018/2019	Our Place in the Universe
	2019/2020	Mathemathical Methods 3
Private Tutoring	2015-2017	For undergraduate students in Physics
		and Mathematics degeres
Commercial Tutoring	2015 - 2017	Private tutoring and workshops for intermediate sized
		groups (Company: Lernerfolg3)

# **SKILLS**

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Languages	German English Spanish	Mother Tounge Fluent Basic conversation
IT & Programming	Python C/C++ Latex Shell scripting HPC SQL	Intermediate - advanced usage Intermediate usage Intermediate usage Basic - intermediate usage Basic - intermediate usage Basic usage
	Git	Basic usage