

# ROBERT STEIN

## CURRICULUM VITAE

MULTI-MESSENGER ASTRONOMY | TIDAL DISRUPTION EVENTS | MACHINE LEARNING

### PERSONAL DATA

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PLACE AND DATE OF BIRTH: London | 10 June 1995  
CITIZENSHIP: British & Irish  
EMAIL: [rdstein@caltech.edu](mailto:rdstein@caltech.edu)  
WEBSITE: [robertdstein.github.io](https://robertdstein.github.io)

### EDUCATION

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JULY 2017 – NOV. 2021	PhD in EXPERIMENTAL PHYSICS, <b>Humboldt University of Berlin / DESY Zeuthen</b> Thesis: “ <i>Search for Multi-Messenger Transients with IceCube and ZTF</i> ” Research Advisor: A. FRANCKOWIAK Graded “ <i>Summa cum laude</i> ” (with the highest distinction) <ul style="list-style-type: none"><li>• Cross-correlation of neutrinos with multi-wavelength catalogues</li><li>• Led response to neutrino alerts as the <i>IceCube realtime shifter</i></li><li>• ZTF follow-up of neutrino/gravitational wave/GRB events</li></ul>
SEP. 2013 – JUNE 2017	MSci in PHYSICS WITH A YEAR IN EUROPE, <b>Imperial College London / University of Hamburg</b> Thesis: “ <i>Reconstruction of Charge Number of Heavy Cosmic Rays using Cherenkov Light</i> ” Research Advisor: D. HORNS (University of Hamburg) Graduated with First Class Honours

### ACADEMIC CAREER

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NOV. 2021 – PRESENT	Postdoctoral Scholar in ASTRONOMY, <b>California Institute of Technology</b> Mentor: M. M. KASLIWAL <ul style="list-style-type: none"><li>• ZTF follow-up of neutrino/gravitational wave/GRB events</li><li>• WINTER data analysis and multi-messenger follow-up</li><li>• Development of TDE photometric classifier: <b>tdescore</b></li></ul>
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### SEMINARS, COLLOQUIA AND CONFERENCE TALKS

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18 invited talks, most recently Caltech Astronomy Colloquium (2023)

### SELECTED TELESCOPE TIME AWARDED (PI ONLY)

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Keck (24 hours, 3 semesters), Palomar (63 hours, 2 semester), Gemini (8 hours, 3 semesters)  
VLA (6 hours, DDT), Chandra (25ks, DDT)

## SCHOLARSHIPS, AWARDS AND HONOURS

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11 <sup>TH</sup> MAY 2023	Winner of the Global Neutrino Network (GNN) Thesis Prize
22 <sup>ND</sup> MAR 2023	Winner of the DPG (German Physical Society) Dissertation Prize for the Matter and Cosmos division, DPG Annual Meeting, Dresden
26 <sup>TH</sup> MAR 2021	Winner of the <i>IceCube Impact Award</i> , IceCube Spring 2021 Meeting
2 <sup>ND</sup> JULY 2020	Winner of first session poster competition, Neutrino 2020 Conference
16 <sup>TH</sup> OCT 2019	Winner of the annual DESY Science Slam, DESY Hamburg
21 <sup>ST</sup> NOV 2018	Winner of the annual Zeuthen Science Slam, DESY Zeuthen

## SELECTED PROFESSIONAL RESPONSIBILITIES

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REVIEWER	<i>ApJ</i> , <i>MNRAS</i> , <i>PASP</i> (journal reviewer), <i>JCMT</i> , <i>Gemini</i> (external referee), <i>Caltech Palomar/Keck</i> (TAC member)
LEADERSHIP	<i>ZTF AGN/TDE Chair</i> (2022-2023), <i>ZTF MMA Co-Convenor</i> (2022-Present), <i>ZTF Publication Board Member</i> (2022-Present) <i>ZTF Collaboration Meeting</i> , <i>Caltech-LANL TDA Workshop</i> , <i>Caltech-LANL Summer School</i> (LOC/SOC)

## SUPERVISION, TEACHING AND OUTREACH

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STUDENT SUPERVISION	Master's degree student (2 students) Bachelor's degree student (1 student) Summer undergraduate research fellow (1 student) High-school students for summer research projects (3 students)
TEACHING	Lecturer: <i>Annual ZTF Summer School</i> (2 years) Teaching Assistant: <i>Experimental Astroparticle Physics</i> (2 semesters)
OUTREACH	<i>Astronomy on Tap</i> Presenter, <i>International Cosmic Day</i> Volunteer (2 years), <i>'Lange Nacht der Wissenschaft'</i> Volunteer (2 years)

## ADDITIONAL INFORMATION

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<b>Collaboration Membership</b>	WINTER, ZTF, GROWTH, LSST-TVSSC
<b>Programming Skills:</b>	Python, PostgreSQL, $\LaTeX$ , Bash, git (Advanced)
<b>Language Skills:</b>	English (Native Speaker), German (Advanced - C1)
<b>Observing Experience:</b>	Keck: LRIS, NIRES, DEIMOS (8 nights) Palomar: WIRC, DBSP, TSpec (13 nights) La Silla: NTT (8 nights)