ROBERT STEIN

CURRICULUM VITAE

Multi-Messenger Astronomy | Tidal Disruption Events | Machine Learning

Personal Data

PLACE AND DATE OF BIRTH: London | 10 June 1995

CITIZENSHIP: British & Irish
EMAIL: rdstein@caltech.edu
WEBSITE: robertdstein.github.io

EDUCATION

July 2017 – Nov. 2021

PhD in Experimental Physics,

Humboldt University of Berlin / DESY Zeuthen

Thesis: "Search for Multi-Messenger Transients with IceCube and ZTF"

Research Advisor: A. Franckowiak

Graded "Summa cum laude" (with the highest distinction)

• Cross-correlation of neutrinos with multi-wavelength catalogues

- Led response to neutrino alerts as the IceCube realtime shifter
- ZTF follow-up of neutrino/gravitational wave/GRB events

SEP. 2013 – June 2017 MSci in Physics with a Year In Europe,

Imperial College London / University of Hamburg

Thesis: "Reconstruction of Charge Number of Heavy Cosmic Rays using

Cherenkov Light"

Research Advisor: D. HORNS (University of Hamburg)

Graduated with First Class Honours

Academic Career

Nov. 2021 -

Present

Postdoctoral Scholar in Astronomy,

California Institute of Technology

Mentor: M. M. Kasliwal

- ZTF follow-up of neutrino/gravitational wave/GRB events
- $\bullet~$ WINTER data analysis and multi-messenger follow-up
- Development of TDE photometric classifier: tdescore

SEMINARS, COLLOQUIA AND CONFERENCE TALKS

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

SELECTED TELESCOPE TIME AWARDED (PI ONLY)

Keck (32 hours, 4 semesters), Palomar (18 hours, 2 semester), Gemini (9 hours, 3 semesters) VLA (6 hours, DDT), Chandra (25ks, DDT)

SCHOLARSHIPS, AWARDS AND HONOURS

11TH MAY 2023 | Winner of the Global Neutrino Network (GNN) Thesis Prize

22ND MAR 2023 | Winner of the DPG (German Physical Society) Dissertation Prize for the Matter and Cosmos division, DPG Annual Meeting, Dresden

26TH MAR 2021 | Winner of the *IceCube Impact Award*, IceCube Spring 2021 Meeting

2ND JULY 2020 | Winner of first session poster competition, Neutrino 2020 Conference

16TH OCT 2019 | Winner of the annual DESY Science Slam, DESY Hamburg

21ST Nov 2018 | Winner of the annual Zeuthen Science Slam, DESY Zeuthen

SELECTED PROFESSIONAL RESPONSIBILITIES

REVIEWER | ApJ, MNRAS, PASP (journal reviwer), JCMT, Gemini (external ref-

 $eree),\ Caltech\ Palomar/Keck\ (TAC\ member)$

Leadership | ZTF AGN/TDE Chair (2022-2023), ZTF MMA Co-Convenor (2022-

Present), ZTF Publication Board Member (2022-Present)

ZTF Collaboration Meeting, Caltech-LANL TDA Workshop, Caltech-

LANL Summer School (LOC/SOC)

SUPERVISION, TEACHING AND OUTREACH

Student | 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: Annual ZTF Summer School at UMN (July 2022, July 2023)

Teaching Assistant: Experimental Astroparticle Physics at HU Berlin

(Summer Semester 2018, Summer Semester 2019)

Outreach | Astronomy on Tap Presenter, International Cosmic Day Volunteer (2 years), 'Lange Nacht der Wissenschaft' Volunteer (2 years)

Additional Information

SUPERVISION

Collaboration Membership WINTER, ZTF, GROWTH, LSST-TVSSC

Programming Skills: Python, PostgreSQL, LATEX, Bash, git (Advanced)

Language Skills: English (Native Speaker), German (Advanced - C1)

Observing Experience: Keck: LRIS, NIRES, DEIMOS (8 nights)

Palomar: WIRC, DBSP, TSpec (13 nights)

La Silla: NTT (8 nights)