Emily L. Hunt – Curriculum Vitae

→ On request emily.hunt.physics@gmail.com emily.space emily.hunt

Education & Employment

2023-2024, Postdoc, Heidelberg University, Germany

Ph.D. 2023, Heidelberg University, Germany

Thesis: "Improving the census of open clusters in the Milky Way with data from Gaia"

Advisor: S. Reffert

M.Phys. 2019, University of Bath, United Kingdom

Thesis: "Inference of photometric galaxy redshifts with a mixture density network"

Advisor: S. Wuyts

Selected Presentations

Colloquium, Königstuhl Colloquium – MPIA, Heidelberg, Germany	2023
Talk, National Astronomy Meeting - Coventry, England, UK	2022
Invited talk, EAS (SS34) - Valencia, Spain	2022
Invited talk, EAS (S32) - Leiden, Netherlands	2021
Seminar, Gaia group – University of Vienna, Austria	2021

Open-source software 🗘

Bluesky Astronomy feeds – lead developer of astronomy community feeds on Bluesky social network, which are used daily by hundreds of astronomers to interact **ocelot** – lead developer of an upcoming open cluster analysis Python package

Awards

Ernst Patzer Award for an excellent publication	€2000 - 2023
University of Bath IMI Undergraduate Research Internship	£2000 - 2018

Teaching & Supervision

Astronomy Lab Course, Heidelberg University	2021
Introduction to Astronomy I, Heidelberg University	2020
Co-supervisor of MSc student, Heidelberg University	2020-2021

Selected Outreach

Invited talk – OUTer SPACE, Max Planck Institute for Astronomy	2023
Interviewed for article - Space.com	2021
Interviewed for article - Thrillist.com	2020
Radio interview – Deutschlandfunk (public radio) & Neue Zürcher Zeitung	2020

Meeting organization & service

SOC for .Astronomy 12	2023
Project leader at CZS school on Scientific Machine Learning in Astrophysics	s 2023
Session leader at GaiaUnlimited Community Workshop	2022
Reviewer for A&A	ongoing

Relevant expertise

Programming languages

Python: expert (e.g. numpy, tensorflow, emcee) **JavaScript:** intermediate (Svelte, SvelteKit)

C/C++: intermediate

Java: basic

Tools and scripting languages

Git/GitHub: expert LaTeX: expert

HTML/CSS: intermediate

ADQL/SQL: basic

Languages

English: native speaker **German:** intermediate

Publications

ADS search §

- 3. **Hunt, Emily L.** and Reffert, Sabine (Submitted). "Improving the open cluster census. III. Using cluster masses, radii, and dynamics to create a cleaned open cluster catalogue".
- 2. **Hunt, Emily L.** and Reffert, Sabine (2023). "Improving the open cluster census. II. An all-sky cluster catalogue with Gaia DR3". A&A, 673, A114 (21 citations)
- 1. **Hunt, Emily L.** and Reffert, Sabine (2021). "Improving the open cluster census. I. Comparison of Clustering Algorithms applied to Gaia DR2 Data". A&A, 646, A104 (58 citations)