# Dr Emma Dodd

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### **EDUCATION**

Postdoctoral research associate - Durham University 2024-present

Manager: Prof. Dr. Alis Deason

PhD - Kapteyn Institute, University of Groningen 2020–2024

Assembly history of the Milky Way using Gaia and spectroscopic surveys

Supervisor: Prof. Dr. Amina Helmi

MPhys - Lancaster University 2016–2020

Can we observe young globular clusters forming at high redshift?

Supervisor: Dr. David Sobral

# OTHER RESEARCH EXPERIENCE

Internship - Lancaster University, Dr. David Sobral Summer 2019

Lyman alpha haloes across cosmic time

Internship - ESA ESTEC/Leiden University, Dr. Alice Zocchi Summer 2018

The dynamical origin of the flattening of globular clusters

Internship - Lancaster University, Dr. David Sobral Summer 2017

Using Hubble and ALMA to unveil the nature of CR7

### **PUBLICATIONS**

Author or co-author of 14 referred publications in international journals. Approximately 291/303 citations and an H-index of 7/8 according to ADS/Google Scholar.

#### Teaching

Lab Demonstrator at Durham University 2025

Physics bachelors year one

Co-Supervision of MPhys student at Durham University 2024-2025

How did the Milky Way form? Using data-driven methods to uncover mergers in the Galaxy

Co-Supervision of Honours students at Kapteyn Institute, University of Groningen 2023-2024

Multiple stellar populations with Gaia DR3 synthetic photometry

Teaching Assistant at Kapteyn Institute, University of Groningen

Spring 2022, 2023, 2024

Physics of Galaxies

Including assistance in the design of a computational project using galaxy data

**Teaching Assistant** at Kapteyn Institute, University of Groningen Spring 2021

Numerical Methods

# AWARDS AND FUNDING

AWARDS AND I UNDING	
• Durham PDDTA (Physics Department Developing Talent Award) Grant	2025
• MW-GAIA COST Action Grant	2023
• Research Academy Prize for Masters Thesis	2020
• DEX XVI Best Talk	2020
• Ogden Trust Intern of the Year	2017
• Ogden Trust Undergraduate Science Scholarship	2016-2020
• Ogden Trust Year 12 Physicist of the Year	2015
Talks	
Invited	
• Invited seminar at Lancaster University	October 2025
• Invited talk on the assembly of the Milky Way with Gaia GaiaNIR session, National As	stronomy Meeting 2025
• Towards Real-Time Galactic Dynamics, Lorentz Centre, Leiden	July 2022
• Invited seminar at Istanbul University	March 2022
Contributed	
Auriga Superstars meeting contributed talk	July 2025
• Stars II contributed talk	June 2025
• Friday Lunch Talk at ICC Durham	June 2025
Colloquium at INAF Bologna	May 2025
• Milky Way Assembly Tale	May 2024
Colloquium at INAF Bologna	February 2024
• Group seminar at University of Chicago	September 2023
• MODEST-23: Star Clusters in the Post Pandemic Era	August 2023
• Group seminar at University of Granada	March 2023
• Lunch talk at Kapteyn Institute	March 2023
• IAUS 377: Early Disk-Galaxy Formation from JWST to the Milky Way	February 2023
• Kapteyn science day 2022	December 2022
• Nova NW1 meeting 2022	September 2022
• Nova NW1 meeting 2021	October 2021
• Lunch talk at Kapteyn Institute	September 2021
• Galaxy cookies, informal talk at Kapteyn Institute	November 2020
• DEX XVI: 2020 vision: progress and tensions in astronomy	January 2020
• LEAPS final presentations	August 2018
Posters	
ullet Bridging scales: star clusters and their host galaxies from the local to the high $z$ Universe	September 2025
• National Astronomy Meeting	July 2025
• Milky Way Assembly Tale	May 2024
• EAS 2022	June 2022
• EAS 2021	June 2021

# Successful Observing Proposals

- PI of ESO proposal 0111.D-0263(A) Nature of accreted streams populating the local halo UVES/VLT (17.1 hrs)
- Co-I on 4 other successful ESO proposals from 2022 2025
- Co-I on a successful HST proposal 2025
- Co-PI of INT proposal TIHMPSS: The INT Halo Metal Poor Star Survey (40 nights 21B/22A, Calhau & Sobral)

### OTHER ACADEMIC ACTIVITIES

• Lead weekly Arxiv coffee discussion	Oct 2025 –ongoing
• Chair and organisation of weekly lunch talks at the department	2022 - 2024
• Young Minds Groningen: secretary and vice president, organise scientific and outreach even	ts 2021 -2024
• Observing experience: 2 nights experience observing with INT/WFC including full data redu	uction 2018
• Outreach: heavily involved with the XGAL outreach team during my undergraduate degree	2017 - 2020

### LANGUAGES AND SOFTWARE

- Python (including numpy, scipy, agama, vaex) : High level
- Gadget Nbody: Good level of experience

### REFERENCES

Available upon request