

hannahdalgleish

hannah@iayc.org ✉ astrophysicsgirl.com 📄 astro_hsd 🐦 hsdalgleish in

Skilled science communicator with 10 years of experience. Confident in all forms of media and able to explain complex astrophysical phenomenon to a diverse range of audiences. Passionate advocate for diversity in STEM and working to help bridge the gap between science and the public. Ample experience in securing funding and coordinating events, locally and globally. Enthusiastic to contribute new ideas and implement positive change.

education

- 2016–Now **PhD Astrophysics** ARI, Liverpool John Moores University
Star clusters across cosmic time: internal kinematics from stellar nurseries to ancient globulars
Supervisors: Prof. Steve Longmore, Prof. Nate Bastian
- 2014–2016 **Master Astrophysics** AstroMundus: University of Innsbruck, Padua, and Belgrade
Quantitative spectroscopy of blue supergiants in NGC 6822
Supervisor: Dr. Miguel A. Urbaneja
- 2010–2014 **Bachelor Astrophysics (2:1)** University of St Andrews
Magnetic fields and spins of young Sun-like stars
Supervisor: Dr. Scott G. Gregory
- 2012–2013 Canadian Robert T Jones Jr Scholar University of Western Ontario
3rd year abroad

experience

- 2017–2019 **Teaching Assistant** University of Liverpool
Lab demonstrator for ~20 third-year undergraduate students. Supervised observations made during the Tenerife field trip as well as data analysis.
- Mar-Jun 2017 **Science Communication and Journalism Intern** ESO, Garching, Germany
Communicating to journalists and the general public: writing press releases, videos scripts, wikipedia texts, updating webpages, and more.
- 2018–2019 **TransPeer** Norway, UK, Portugal, and Sweden
One of three LJMU PhD students selected to participate in this Erasmus+ funded *Transnational Project to Enhance Researcher Employability*. The programme focused on
- private and public sector co-operation;
 - personal effectiveness and professional impact;
 - team work, communication, mentorship and career management;
 - innovation, value-creation and conflict management.

awards

- Nov 2019 **Three Minute Wonder Competition** Institute of Physics
Winner of Merseyside Heat; the final will take place at the Royal Institution
- Mar 2019 **Three Minute Thesis Competition** Vitae
Winner of Faculty Heat
- Mar 2019 **I'm a Scientist, Get me out of here** Dubnium Zone, STFC
2nd place in this online STEM engagement activity, voted by school students across the UK.
- Nov 2018 **Early Career Physics Communicator Award** Institute of Physics
Finalist for communicating astrophysics to diverse audiences and engaging researchers in the importance and theory of science communication.
- Jun 2014 **Best Undergraduate Student Lecture** Conference for Astronomy and Physics Students
Voted by the delegates for a talk on my Bachelor's research

Summer 2013	Rectors' and Physics Summer Vacation Scholar Awarded £1000 for astronomy outreach in Hawai'i:	University of St Andrews
	<ul style="list-style-type: none"> • Mauna Kea Visitor Station: teaching practical and cultural astronomy to the public • Caltech Sub-millimetre Observatory: observational support • 'Imiloa Planetarium: volunteering at events including Nano Visitors Day • Panoptes: using Arduino to develop a weather station prototype for this exoplanet re- search project 	
2010–2014	Dr Lawrence M Wodehouse Scholar £12,000 scholarship to study at the University of St Andrews, Scotland	University of St Andrews

communication

2017–Now	Oral Presentations (Scientific) <i>The dynamical mass-to-light ratio of local star clusters</i>	International and national conferences
	<ul style="list-style-type: none"> • European week of astronomy and space science • Tracing star and cluster formation across cosmic times • Current and future observing facilities • International conference of physics students 	Lyon & Liverpool, 2019/18 Sexten, 2018 Belgrade, 2018 Helsinki, 2018
	<i>Ionised gas kinematics in bipolar H II regions</i>	
	<ul style="list-style-type: none"> • European week of astronomy and space science • Cardiff Galactic star formation workshop 	Liverpool, 2018 Cardiff, 2017
2018–Now	Oral Presentations (Outreach) <i>Science camps overlooked: a 50-year old science communication practice</i>	Conferences and outreach events
	<ul style="list-style-type: none"> • Public communication of science and technology conference 	Aberdeen, 2020
	<i>The mysterious case of the star cluster</i>	
	<ul style="list-style-type: none"> • Pint of science • Merseyside astronomy day • Palestinian advanced physics school 	Manchester, 2020 Liverpool, 2019 Palestine, 2019
	<i>Astrophysics: what it is and why it isn't scary</i>	
	<ul style="list-style-type: none"> • Ignite Liverpool 	Liverpool, 2018
	<i>50 years of the International Astronomical Youth Camp</i>	
	<ul style="list-style-type: none"> • Communicating astronomy with the public conference • European week of astronomy and space science 	Fukuoka, 2018 Liverpool, 2018
	<i>Astronomy outreach in Palestine</i>	
	<ul style="list-style-type: none"> • International meeting for science in Palestine 	Cambridge, 2018
2018–Now	Workshops I lead workshops on the science of science communication	
	<ul style="list-style-type: none"> • Natural sciences society • International conference for physics students 	York, 2019 Helsinki, 2018

outreach and other activities

2014–Now	Former President (2016–2017) IWA organises the International Astronomical Youth Camp (IAYC), a 3-week research camp which hosts ~sixty-five 16-24 year olds in a different country each year.	International Workshop for Astronomy
	<ul style="list-style-type: none"> • Designed, carried out, and analysed the IAYC Survey (300+ respondents) • Leading a new sponsorship effort (obtained €1,000+ so far) • Creating and maintaining the IAYC Astroletter (330+ subscribers) • Fundraised £10,000 for participants from disadvantaged backgrounds • General coordinator for the first camp ever held in the UK • Secured a £2,000 grant from the Royal Astronomical Society • Supervision of ~30 participants on projects relating to <ul style="list-style-type: none"> – the science of communicating astronomy – construction of a radio telescope – historical and cultural astronomy 	2017–2020 2019–Now 2017–Now 2015–2018 UK, 2016 2016 Spain, 2020 Germany, 2015 Austria, 2014

2018–2019	Palestinian Physics School Organiser	Scientists for Palestine
	Co-organised the 3 rd Palestinian Advanced Physics School (Birzeit University, July 2019). In addition to giving a talk on globular clusters, I led a workshop on careers and opportunities in astrophysics. Fifty students took part, including fourteen Gazan students who participated remotely.	
2018–2019	Editor-in-Chief	Journal of the International Association for Physics Students
	Produced, edited, and designed jIAPS (using InDesign). I managed the article competition and commissioned new articles focused on physics outreach, diversity and equality, and the philosophy of physics. I worked with the authors to improve and develop their writing, and implemented a new creative competition. jIAPS 2019: https://bit.ly/2ZHt9EA	
2017–Now	Committee Membership	Astrophysics Research Institute, LJMU, UK
	In these roles I focused on diversity and how to improve reach to minority communities.	
	<ul style="list-style-type: none"> • Public Engagement and Outreach Committee • PhD Task Force Committee • EWASS Local Organising Committee 	
		Liverpool, 2017–2018
Nov 2019	Gender Gap in Science Conference	Trieste, Italy
	Selected as a representative for the UK, astronomy, and early career researchers.	
Summer 2019	Media Production	Liverpool World Museum, UK
	I was professionally filmed for the Astronomy Photographer of the Year exhibit, explaining the science behind the winning Corona Australis Dust Complex image.	
Spring 2019	Interviewer	The British Federation of University Women
	I interviewed ethnic minority staff for research on women in academia on behalf of the BFWG. The data has been included in this publication: https://bit.ly/37wcmXX	
Mar 2019	Voice of the Future	Houses of Parliament, UK
	Selected to represent the Royal Astronomical Society and Institute of Physics, asking Parliamentarians important questions concerning young people in science today.	
Dec 2018	People of Space	Twitter
	I hosted the @People_of_Space Twitter account for one week, to ~3400 followers.	

technical skills, languages, and interests

technical skills: python, IDL, PyRAF, UNIX, OS X, Windows, \LaTeX , MS Office, Open Office, Photoshop, InDesign, Inkscape, iMovie **languages:** english (fluent), spanish (basic) **interests:** classical singing, pottery, painting, swing dancing, travelling, writing, blogging, reading fantasy, sci-fi, and non-fiction

publications

journal articles

Assessing the influence of one astronomy camp over 50 years

Hannah Dalgleish and Josh Veitch-Michaelis

3 (Dec. 2019). *Nature Astronomy*, DOI: [10.1038/s41550-019-0965-y](https://doi.org/10.1038/s41550-019-0965-y)

The WAGGS project - III. Discrepant mass-to-light ratios of Galactic globular clusters at high metallicity

Hannah Dalgleish, Sebastian Kamann, Christopher Usher, Holger Baumgardt, Nate Bastian, et al.

(2019). *MNRAS*, submitted

Ionized gas kinematics in bipolar H II regions

Hannah Dalgleish, Steven N. Longmore, Thomas Peters, Jonathan D. Henshaw, Josh Veitch-Michaelis, et al.

478.3 (Aug. 2018). *MNRAS*, DOI: [10.1093/mnras/sty1109](https://doi.org/10.1093/mnras/sty1109)

The WAGGS project - II. The reliability of the calcium triplet as a metallicity indicator in integrated stellar light

C. Usher, T. Beckwith, S. Bellstedt, A. Alabi, L. Chevalier, N. Pastorello, P. Cerulo, **H. Dalgleish**, A. Fraser-McKelvie, et al.

482.1 (Jan. 2019). DOI: [10.1093/mnras/sty2611](https://doi.org/10.1093/mnras/sty2611)

No evidence for intermediate-mass black holes in the globular clusters ω Cen and NGC 6624

H. Baumgardt, C. He, S. M. Sweet, M. Drinkwater, A. Sollima, J. Hurley, C. Usher, S. Kamann, **H. Dalgleish**, et al.

488.4 (Oct. 2019). DOI: [10.1093/mnras/stz2060](https://doi.org/10.1093/mnras/stz2060)