

# hannahdagleish

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## education & employment

- Jan 2022–July 2022 **OPEN Fellow** Dark Skies and Society Physics, University of Oxford  
Working with Armagh Observatory and the local council as an Oxford Policy Engagement Network Fellow. I engaged with numerous stakeholders and organised workshops to exchange knowledge on light pollution and policy.
- Apr 2020–Sept 2021 **Postdoctoral Researcher** Astronomy for Development Physics, Universities of Oxford & Namibia  
Working with Prof. Garret Cotter in collaboration with the University of Namibia. Implementing astrotourism and astronomy education as a means for socioeconomic development in Namibia.
- 2016–2020 **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: Universities 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  
3<sup>rd</sup> year abroad

## experience

- 2020–2023 **RAS Councillor** Royal Astronomical Society  
Elected by RAS Fellows to serve as a trustee of the RAS, by more than 400 votes.
- 2017–2019 **Teaching Assistant** University of Liverpool  
Lab demonstrator for ~20 third-year undergraduate students. Supervised observations made during a field trip in Tenerife, as well as data analysis.
- 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.
- 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.

## awards

- Sept 2022 **Green Talents** German Federal Ministry of Education and Research  
Awarded funding for a short research stay in Germany in 2023.
- Aug 2022 **Falling Walls Engage Finalist** Falling Walls  
Finalist for science engagement with the International Astronomical Youth Camp.
- May 2022 **Three Minute Wonder Competition** Institute of Physics  
Winner of Merseyside Heat; competed in the final held at the Royal Institution.
- March 2020 **STEM for Britain** Parliamentary & Scientific Committee  
Finalist of the major scientific poster competition and exhibition, held in Parliament.
- 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.

## communication

2018–Now	<p><b>Oral Presentations</b> (Astronomy and society)</p> <p>The culture of astronomy and its scientists</p> <p>Astronomy as a tool for human capacity development</p> <p>Astronomy outreach in Namibia: H.E.S.S. and beyond</p> <p>Astrotourism and sustainable development in Namibia</p> <p>Astronomy camps as a long-term, successful engagement practice</p> <p>Sustainable development in Namibia: astrotourism and education for schools</p> <p>The mysterious case of the star cluster</p> <ul style="list-style-type: none"> <li>• Merseyside astronomy day</li> <li>• Palestinian advanced physics school</li> </ul> <p>Astrophysics: what it is and why it isn't scary</p> <p>50 years of the International Astronomical Youth Camp</p> <ul style="list-style-type: none"> <li>• Communicating astronomy with the public conference</li> <li>• European week of astronomy and space science</li> </ul> <p>Astronomy outreach in Palestine</p> <ul style="list-style-type: none"> <li>• International meeting for science in Palestine</li> </ul> <p>We are all made of stars: from the Big Bang to the heat death of the Universe</p> <ul style="list-style-type: none"> <li>• University of Liverpool Astronomy Society</li> <li>• University of Warwick Astronomy Society</li> <li>• Global human: poetics of science seminar</li> </ul>	<p>Conferences and outreach events</p> <p>ESO2022; NAM2022</p> <p>HEASA2021; SAIP2021</p> <p>ICRC2021</p> <p>SAAO2020; ASP2020; AAS2021</p> <p>EAS2020</p> <p>EAS2020</p> <p>Liverpool, 2019</p> <p>Palestine, 2019</p> <p>Ignite Liverpool, 2018</p> <p>Fukuoka, 2018</p> <p>Liverpool, 2018</p> <p>Cambridge, 2018</p> <p>Liverpool, 2017</p> <p>Warwick, 2017</p> <p>Scottish Borders, 2017</p>
2017–Now	<p><b>Oral Presentations</b> (Astrophysics)</p> <p>The dynamical mass-to-light ratio of local star clusters</p> <ul style="list-style-type: none"> <li>• European week of astronomy and space science</li> <li>• Tracing star and cluster formation across cosmic times</li> <li>• Current and future observing facilities</li> <li>• International conference of physics students</li> </ul> <p>Ionised gas kinematics in bipolar H II regions</p> <ul style="list-style-type: none"> <li>• European week of astronomy and space science</li> <li>• Cardiff Galactic star formation workshop</li> </ul>	<p>International and national conferences</p> <p>Lyon &amp; Liverpool, 2019/18</p> <p>Sexten, 2018</p> <p>Belgrade, 2018</p> <p>Helsinki, 2018</p> <p>Liverpool, 2018</p> <p>Cardiff, 2017</p>
2018–Now	<p><b>Workshops</b></p> <p>I lead workshops on the science of science communication</p> <ul style="list-style-type: none"> <li>• International Astronomical Youth Camp</li> <li>• Natural sciences society</li> <li>• International conference for physics students</li> </ul>	<p>Online, 2020</p> <p>York, 2019</p> <p>Helsinki, 2018</p>

## outreach, service, policy

May 2022	<p><b>Science and Technology Committee</b></p> <p>Invited to provide evidence on the impacts of light pollution on humans and the environment.</p>	<p>House of Lords</p>
2020-2022	<p><b>Co-Chair of the Sustainability WG</b></p> <p>Through leading a group of nine, we worked with the EAS to reduce carbon emissions and create awareness among the astronomy community.</p>	<p>European Astronomical Society</p>
2014–Now	<p><b>Former President</b> (2016–2017)</p> <p>IWA organises the International Astronomical Youth Camp (IAYC), a 3-week research camp hosting ~sixty-five 16-24 year olds in a different country each year.</p> <ul style="list-style-type: none"> <li>• Designed, carried out, and analysed the IAYC Survey (300+ respondents)</li> <li>• Creating and maintaining the IAYC Astroletter (330+ subscribers)</li> <li>• Fundraised €25,000+ for the camp and the grant program</li> <li>• General coordinator for the first IAYC held in the UK</li> <li>• Supervision of ~30 participants on projects relating to             <ul style="list-style-type: none"> <li>– astronomy and sustainable development</li> <li>– the intersection of astronomy and society</li> <li>– construction of a radio telescope</li> <li>– historical and cultural astronomy</li> </ul> </li> </ul>	<p>International Workshop for Astronomy</p> <p>2017–2020</p> <p>2017–Now</p> <p>2015–Now</p> <p>UK, 2016</p> <p>Germany, 2022</p> <p>Online, 2020</p> <p>Germany, 2015</p> <p>Austria, 2014</p>

- 2018–2019 **Palestinian Physics School Organiser** Scientists for Palestine  
Co-organised the 3<sup>rd</sup> 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>
- 2017–2020 **Committee Membership** Astrophysics Research Institute, LJMU, UK  
In these roles I focused on diversity and how to improve reach to minority communities.
  - 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.
- Mar 2019 **Voice of the Future** Houses of Parliament, UK  
Represented the Royal Astronomical Society and Institute of Physics, asking Parliamentarians important questions concerning young people in science today. <https://bit.ly/2UKKcVf>.

## publications

### journal articles

#### Dark sky tourism

**H. Dalglish** and D. Bjelajac

Encyclopedia of Tourism Management and Marketing (Aug. 2022). DOI: [10.4337/9781800377486](https://doi.org/10.4337/9781800377486)

#### Can we turn off the lights?

**H. Dalglish**

Astronomy and Geophysics (Oct. 2021). DOI: [10.1093/astrogeo/atab087](https://doi.org/10.1093/astrogeo/atab087)

#### Under one sky: astronomy as a catalyst for cultural relations

**H. Dalglish**

British Council cultural essay collection (Apr. 2021). DOI: [10.5281/zenodo.6337318](https://doi.org/10.5281/zenodo.6337318)

#### Forging a sustainable future for astronomy

L. Burtscher, **H. Dalglish**, D. Barret, T. Beuchert, A. Borkar, F. Cantalloube, A. Frost, V. Grinberg, N. Hurley-Walker, et al.

Nature Astronomy 5 (Sept. 2021). DOI: [10.1038/s41550-021-01486-x](https://doi.org/10.1038/s41550-021-01486-x)

#### Dark sky tourism and sustainable development in Namibia

**H. Dalglish**, G. Mengistie, M. Backes, G. Cotter, and E. K. Kasai

IAUS367 Proceedings: Education and Heritage in the Era of Big Data in Astronomy 367 (Jan. 2021). DOI: [10.1017/S1743921321000478](https://doi.org/10.1017/S1743921321000478)

#### Astronomy for development

**H. Dalglish**

Astronomy and Geophysics 61.6 (Dec. 2020). DOI: [10.1093/astrogeo/ataa084](https://doi.org/10.1093/astrogeo/ataa084)

#### Assessing the influence of one astronomy camp over 50 years

**H. Dalglish** and J. Veitch-Michaelis

Nature Astronomy 3 (Dec. 2019). 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

**H. Dalglish**, S. Kamann, C. Usher, H. Baumgardt, N. Bastian, J. Veitch-Michaelis, A. Bellini, S. Martocchia, G. S. Da Costa, et al.

492.3 (Mar. 2020). DOI: [10.1093/mnras/staa091](https://doi.org/10.1093/mnras/staa091)

#### Ionized gas kinematics in bipolar H II regions

**H. Dalglish**, S. N. Longmore, T. Peters, J. D. Henshaw, J. Veitch-Michaelis, and J. S. Urquhart

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