

We are writing as members of the UK Exoplanet research community to express our great concern regarding the proposed 30% cuts to the Science and Technology Facilities Council's (STFC) particle physics, astronomy, and nuclear physics (PPAN) programme. The UK Exoplanet community has leading roles in virtually all major international exoplanet projects and cuts to PPAN funding threaten the vitality of the exoplanet community as well as its leadership on the world stage.

The UK Exoplanet research community holds an annual meeting, which this year was held in Bristol. With a record number of attendees, the meeting illustrated just how this community has grown since the first UK Exoplanet Community Meeting held in Cambridge in 2014. It is an incredibly vibrant and active community that is dominated by excellent early career researchers who are playing key roles in driving exoplanet research in the UK. As such, we are particularly concerned by the potential for the proposed PPAN cuts to cause long-term damage to the standing of UK science.

Notwithstanding the proposed cuts, this is an extremely exciting time for exoplanet research. We are moving from an era of detecting exoplanets to one of understanding their formation, determining their internal structure, probing the composition of their atmospheres, and characterising their climates. UK researchers have led numerous extremely successful ground-based projects as well as playing leading roles in exoplanet science with the James Webb Space Telescope (JWST). The launch of the European Space Agency's (ESA) PLATO mission in 2027, first-light of the Extremely Large Telescope (ELT) later this decade, and the launch of the UK-led Ariel mission in the early 2030s also indicate a very bright future. The UK exoplanet community is also preparing for a major role in the Habitable Worlds Observatory (HWO), a space observatory with an expected launch date in the 2040s.

One of the next great scientific frontiers will be the search for life on planets outside the Solar System and the UK Exoplanet community is primed to play a key role in this endeavour. Not only does this align strongly with the STFC's science challenges in frontier physics, the UK Space Frontiers Astronomy and Astrophysics panel ranked "life on other planets" as the top science priority, and ranked HWO as the top mission priority. It is also a topic that is of great interest to the broader public. In a study looking at how learners in different cultures relate to science and technology, Sjøberg & Schreiner (2010) found that the possibility of life outside Earth is the one research question that unified people from all backgrounds, nationalities and genders. Essentially, everyone wants to know if there is life outside Earth.

However, like other areas of astronomy, particle physics, and nuclear physics (PPAN), the excitement generated by our research is overshadowed by the planned cuts to STFC's PPAN programme. The current intention is to cut PPAN funding to something like 70% of the funding level in 2024/2025. This level of cut will do enormous damage to exoplanet research and will have a particularly adverse effect on early career researchers, many of whom may lose their jobs or prospects for ones in the future. Since the UK Exoplanet community is dominated by very active early career researchers, the proposed cuts would severely hamper the UK's capacity to contribute to what is very obviously a topical and high impact research area.

According to the STFC Astronomy Grants Panel (AGP) Chair's report in 2026, funding for postdoctoral researchers has already dropped since 2024. While we welcome the recent assurance that postdoctoral numbers will be protected from further cuts, we note that these are to be fixed at the 2025/26 level that already include very significant cuts to an historically low level. We remain seriously concerned that this assurance locks us in to a level that leaves UK competitiveness in astronomy unsustainable. We should also stress that it's not just concern about funding for postdoctoral researchers, funding for projects is also under threat. The STFC prioritisation exercise has highlighted 48 projects that are at risk of losing funding. This includes projects explicitly focussed on exoplanet science, but also includes others that provide support for exoplanet research. The proposed cuts risk making it extremely difficult for UK researchers to continue leading the ground-breaking research that these projects enable.

We understand that UK Research and Innovation (UKRI) is changing the way in which it allocates funding, but have yet to see a clear justification why this necessitates such large cuts to the PPAN programme, especially given a record funding award to UKRI. If overall funding is increasing and curiosity-driven research is protected, why are we seeing a reduction in funding for curiosity-driven research in PPAN areas? We have also seen little indication that any alternative options have been seriously investigated.

It is clearly challenging to manage a budget that provides facilities for research across numerous research councils, covers international subscriptions, and also directly funds research in specific areas (PPAN). However, any cuts to extremely successful research areas should be based on a careful assessment of the strategic priorities, and on community consultations, and must not simply be an unintended consequence of complex budget allocations. It is crucial for there to be more clarity about what is driving these planned cuts.

As should be clear, cuts of this magnitude will do immense damage to PPAN research. Given that some of the most exciting advances in exoplanet science are likely to happen within the next couple of decades, if these cuts do go ahead it will risk the UK dropping out of its leadership position and losing the chance to make major contributions to one of the most exciting scientific advances of this generation.

Yours sincerely,

On behalf of the undersigned researchers in the UK Exoplanet community.

Signatories:

Prof. Didier Queloz, University of Cambridge, Professor

Dr Hannah Wakeford, University of Bristol, Associate Professor in Astrophysics

Prof. Amaury Triaud, University of Birmingham, Professor of Exoplanetology

Dr Annelies Mortier, University of Birmingham, Associate Professor

Prof. Ken Rice, University of Edinburgh, Professor and Head of the Institute for Astronomy

Prof. Zoe Leinhardt, University of Bristol, Professor and Astrophysics Theme Leader
Dr Thomas Wilson, University of Warwick, Assistant Professor
Dr Ryan MacDonald, University of St Andrews, Lecturer in Extrasolar Planets
Dr Sarah Casewell, University of Leicester, Lecturer
Dr Heather Cegla, University of Warwick, Associate Professor and UKRI Future Leaders Fellow
Dr Anjali Piette, University of Birmingham, Assistant Professor
Dr Matt Burleigh, University of Leicester, Reader
Prof. Jayne Birkby, University of Oxford, Professor
Prof. Peter Wheatley, University of Warwick, Professor
Prof. Beth Biller, University of Edinburgh, Professor
Prof. Paul Palmer, University of Edinburgh, Professor
Dr Jo Kershaw, University of Leeds, Research Software Engineer
Dr Jorge Fernandez Fernandez, University of Warwick, Postdoctoral Researcher
Dr Amy Bonsor, University of Cambridge, Associate Professor
Prof. Bill Chaplin, University of Birmingham, Professor of Astrophysics
Dr Lin Qiao, Queen Mary University of London, Postdoctoral Research assistant
Dr Thomas Haworth, Queen Mary University of London, Reader in Astrophysics
Dr Martin Dominik, University of St Andrews, Reader in Physics & Astronomy, Co-Director of St Andrews Centre for Exoplanet Science (StACES)
William Brilliant, University of Cambridge, PhD student
Dr Oscar Barragan, University of Warwick, Fellow
Prof. Hugh Jones, University of Hertfordshire, Professor
Dr Jenni French, University of Birmingham, Postdoc
Dr Subhanjoy Mohanty, Imperial College London, Associate Professor
Dr Matthew Battley, Queen Mary University of London, Postdoctoral Research Assistant
Matthew Cole, University of Edinburgh, PhD Student
Prof. Nathan Mayne, The University of Exeter, Professor
Prof. Christopher Watson, Queen's University Belfast, Professor
Dr David Armstrong, University of Warwick, Associate Professor
Gergely Friss, University of Edinburgh, PhD Candidate
Dr Eric Hébrard, University of Exeter, Senior Lecturer in Astrophysics
Dr Matt Lodge, University of Bristol, Postdoctoral Researcher
Dr Stephen Thomson, University of Exeter, Senior Lecturer
Dr Cathal Maguire, University of Bristol, Research Associate
Dr Denis Sergeev, University of Bristol, Lecturer
Prof. Carole Haswell, The Open University, Professor of Astrophysics
Dr James Kirk, Imperial College London, Royal Society University Research Fellow
Alex Corbett, University of Bristol, PhD Student
Dr James Rogers, University of Cambridge, Senior Fellow
Dr Faith Hawthorn, Rugby School, Former Postdoctoral Researcher
Prof. Richard Nelson, Queen Mary University of London, Professor
Cat Leedham, University of Cambridge, PhD Student
Dr Katy Chubb, University of Bristol, Senior Research Associate in Exoplanet Atmospheres
Yasmin Davis, University of Birmingham, PhD Student

Prof. Adrian Barker, University of Leeds, Professor of Applied Mathematics
Dr John Barnes, The Open University, Research Fellow
Dr John Taylor, Keele University, Senior Lecturer
Daisy Turner, University of Birmingham, PhD student
Dr Richard Booth, University of Leeds, University Academic Fellow and Royal Society University
Research Fellow
Dr Federica Rescigno, University of Birmingham, Research Fellow
Dr Adam Stevenson, University of Birmingham, Research Fellow
Dr Neil Lewis, University of Exeter, Leverhulme Trust Early Career Fellow
Matthew Clay, University of Birmingham, Student
Madison Scott, University of Birmingham, PhD Student
Dr Larissa Palethorpe, University of Bristol, Research Fellow
Dr Farzana Meru, University of Warwick, Associate Professor (Reader) and Royal Society Dorothy
Hodgkin Fellow
Ross Dobson, University College London, PhD Student
Danny McCulloch, University of Exeter, PhD candidate
Prof. Alistair Glasse, UK Astronomy Technology Centre, Professor
Dr Trent Dupuy, University of Edinburgh, Reader
Dr Dimitri Veras, University of Warwick, Reader
Dr Barry Smalley, Keele University, Senior Lecturer
Dr Maria de Juan Ovelar, University of Warwick, PDRF
Dr Andrew Swan, University of Warwick, Postdoctoral researcher
Kiran Jhass, University of Birmingham, PhD Student
Prof. Andrew Cameron, University of St Andrews, Professor
Dr Sarah Rugheimer, University of Edinburgh, Chancellor's Fellow, Faculty
Dr Lili Alderson, Cornell University/University of Bristol, Postdoctoral Fellow
Dr Ben Sutcliffe, University of Edinburgh, Postdoctoral Research Associate
Dr Andrew Buchan, University of Warwick, Postdoctoral Research Fellow
Prof. Stefan Kraus, University of Exeter, Professor
Dr David Brown, University of Warwick, Senior Research Fellow
Dr John Young, University of Cambridge, Assistant Research Professor
Zhouyu Zhang, The University of Manchester, PhD student
Dr Prachi Khatri, Cardiff University, Postdoctoral Research Associate
Dr John Ilee, University of Leeds, STFC Ernest Rutherford Fellow/Associate Professor
Dr Kai Hou Yip, King's College London, Lecturer
Dr Ancy Anna John, University of Birmingham, Research Fellow
Prof. Richard Alexander, University of Leicester, Professor
Jacob Ayre, University of Birmingham, PhD Student
Dr Sushuang Ma, King's College London, Postdoctoral Research Associate
Dr Mariangela Bonavita, University of Edinburgh, Honorary Fellow
Megan Mealing, Cardiff University, PhD Student
Mitchell Yzer, University of Oxford, PhD student
Prof. Manoj Joshi, University of East Anglia, Professor of Climate Dynamics

Dr Geert Jan Talens, University of Oxford, Postdoc
Ben Davies, University of Warwick, PhD Student
Marcelo Aron Fetzner Keniger, University of Warwick, PhD student
Amena Faruqi, University of Warwick, PhD Student
Jamie Williams, University of Warwick, PhD student
Prof. Hugo Lambert, University of Exeter, Professor
Prof. Mark Wyatt, University of Cambridge, Professor
Dr Ben Lakeland, University of Birmingham, Research Fellow
Prof. Raymond Pierrehumbert, University of Oxford, Professor
Dr Claire Guimond, University of Oxford, Junior Research Fellow
Dr James McCormac, University of Warwick, Assistant Professor
Dr Pierre Maxted, Keele University, Reader in Astrophysics
Anand Bhongade, University of Birmingham, PhD Student
Dr Vatsal Panwar, University of Birmingham, Postdoctoral Research Fellow
Dr Yvonne Unruh, Imperial College London, Associate Professor
Dr Clark Baker, University of Cambridge, Visiting Postdoctoral Research Associate
Dr Cynthia Ho, Queen Mary University of London, Postdoctoral Research Associate
Dr Eamonn Kerins, University of Manchester, Reader in Physics and Astronomy
Dr Felix Sainsbury-Martinez, University of Leeds, Postdoc
Dr Olja Panic, University of Leeds, Associate Professor
Dr Soko Matsumura, University of Dundee, Senior Lecturer
Prof. Keith Horne, University of St Andrews, Emeritus Professor of Astronomy
Dr Christina Schoettler, Keele University, Research Associate
Prof. Nikku Madhusudhan, University of Cambridge, Professor of Astrophysics and Exoplanetary
Science
Joe Williams, University of Exeter, PhD student
Dr Lauren Doyle, University of Warwick, Assistant Professor
Wenjun Chen, University of Warwick, Phd Student