6 February 2026

The Lord Vallance of Balham KCB
House of Lords
London
SW1A 0PW

Dear Lord Vallance,
cc: Liz Kendall MP, Dame Chi Onwurah, Professor Sir Ian Chapman

We write to you as a group of UKRI Future Leaders Fellows (FLFs), Royal Society University Research Fellows, and STFC Ernest Rutherford Fellows. As advanced fellows, the UK scientific community has entrusted us with the future of the UK's curiosity-driven research. It is therefore with urgency that we express our extreme concerns in relation to the announced changes to the funding of particle physics, astronomy and nuclear physics (PPAN) through the Science and Technology Facilities Council (STFC). These changes and the reprioritisation of PPAN investments will decimate the world-leading research undertaken by the UK community in these areas, damaging the UK's internationally regarded and highly trusted reputation, a key driver of economic growth, and a pivotal pathway in skills and training. Moreover, this will devastate the career prospects of early- and mid-career researchers such as ourselves, removing the skills and expertise of a generation of researchers, who would have been able to secure UK science for the future.

While we have heard that curiosity-driven research is considered essential, we have also been told (via a letter from Michele Dougherty on 28 January 2026) that PPAN investments will reduce to 70% of the 24/25 budget over the 2026-2030 Spending Review Period. We consider this to be an existential threat to our field. Many of our projects will not be viable, or will not be able to be completed with a reduction in funding of 30%. In these cases, we cannot deliver on agreements we have made with our international collaborators and we may have to withdraw from projects entirely. In some collaborations, particularly where UK scientists hold significant international leadership, UK withdrawal could mean the end of the entire international project. This would cause irreparable reputational damage and loss of trust in the international research community. If we lose our reputation as a reliable research partner, it will be very hard to maintain our position as a world leader in international science, or to attract global talent here to work in our universities, and it will lead to a brain drain away from UK institutions to international ones.

At the meeting of the Science, Innovation, and Technology Committee on Tuesday 3rd February 2026, a significant point of discussion was around how to attract and retain talent in the UK, and the FLF scheme was held up as a cornerstone of our current approach. As beneficiaries of UK Fellowships we all believe strongly in the missions of these schemes, and they have been successful in attracting many of us to the UK, or back to the UK, from overseas. However, PPAN research takes place within large international collaborations where construction and operations timelines are much longer than the 5-8 years of a fellowship. Deprioritisation or reduction of these projects will make it impossible to do the research funded through our fellowships, because it relies on being part of a broader network of scientists and access to large-scale equipment. This will damage the attractiveness of the UK as a research environment and therefore hurt the programme in future years.

A 30% cut to the PPAN research programmes, in addition to the deprioritisation of projects previously funded through the Infrastructure Fund, would significantly exacerbate the brain drain problem by cutting off the pipeline for early-career researchers. Following the 15% reduction of the Particle Physics Consolidated Grant in 2025 compared to previous years, we have seen an extreme decline in the number of postdoctoral positions available in the UK. Many of the PhD students and postdoctoral researchers we supervise are coming to the end of their terms and finding there are no opportunities in the UK; we have found ourselves advising them to apply overseas. Not only will this exacerbate existing inequalities in the ability to pursue a career in research, it means we risk losing a generation of

researchers in the UK. This is not only a problem for academia but also for the broader economy: the majority of people who do a PhD or postdoctoral research in our field take their skills to industry and generate growth. Interrupting the career pipeline for early-career researchers in this way will cause long-term damage that will take a long time to recover from.

Today's blue sky research is tomorrow's applied research. 100 years ago quantum mechanics was the most esoteric field of physics, and today we all carry quantum engineered devices in our pockets. Cutting off the beginning of the innovation pipeline will stifle the UK's ability to move first into the most promising new areas. In addition, the technologies, equipment, and computing techniques we develop to enable our research underpin the innovation economy. Estimates of the return on investment for our research range from £6.5 per £1 invested (from a review of 40 spin-off companies founded 2002–2020 from STFC-funded research at universities and national labs) to £10 per £1 invested (from an estimate of the ROI on building and operating a particle physics experiment by former STFC Chief Executive, John Womersley). The unique exabyte-scale datasets of our field and our ability to apply cutting edge machine learning (ML) in applications requiring decisions in microseconds, offer an unparalleled training ground, and the vast majority of our trainees take their training to benefit the private sector post-PhD. AI, ML, and big data techniques are a cornerstone of current high-tech industry growth. Many of those at the forefront of these innovations, as well as many lecturers of the new wave of AI/ML/data science courses training the industry leaders of the future, are PPAN researchers and have come through similar fellowships to ours. The value added by PPAN researchers is, and will be, immeasurable. Interrupting this pipeline would also be a great detriment to those industries.

On a personal note, we are concerned that we may not be able to continue our research in the UK following our fellowships. Reduction of funding will make it very difficult for us to sustain research groups beyond our fellowships. Moreover, we are hearing from Vice Chancellors in some of our universities that they have the impression that PPAN research is not supported by the government and is therefore a risky area for the university to invest in. The impact of that will likely be to reduce the number of available positions, which could lead to fellows having to leave the UK at the end of their fellowships. We also worry that this environment (and international perception) will make the UK a less appealing prospect for future cohorts. This is directly contradictory to the aim of the FLF scheme "to develop the next wave of world-class research and innovation leaders in academia and business".

We all want the same thing: for the UK to continue to be the world-leading science powerhouse that attracted us to build our careers here, and are eager to engage with you on this topic. We appreciate the public investment that supports PPAN research and believe we owe it to the public to use that investment in the way that best serves the interests of the country. The proposed changes to the funding of curiosity-driven research in the areas of particle physics, astronomy, and nuclear physics will harm the UK's ability to attract global talent, standing within the international research community, pipeline of highly-skilled workers, and ultimately economic growth. Not all of us signing this letter are working in STFC-funded areas, but all signatories believe that the reduction of the PPAN programme to 70% of its previous size would be devastating to UK science.

Yours sincerely,

**First 62 Signatories:**

**UKRI Future Leaders Fellows**
Kirsty Duffy, University of Oxford
Conor Fitzpatrick, Manchester
James Osborn, Durham University
Martin Archer, Imperial College London
Dr Luke Barnard, University of Reading
Patrick Dunne, Imperial College London
Maria Val Martin, University of Sheffield

Dr Linda Cremonesi, Imperial College London
Eva Vilella-Figueras, University of Liverpool
Peter Millington, University of Manchester
Sownak Bose, Durham University
Sebastian Kamann, Liverpool John Moores University
Christopher Chen, Queen Mary University of London
Prof. Richard Morton, Northumbria University
Anna Lisa Varri, University of Edinburgh
David Schaich, University of Liverpool
Payel Das, University of Surrey
Vicencio Oostra, Queen Mary University of London

**STFC Ernest Rutherford Fellows**
Elena Gramellini, University of Manchester
Dr James O'Donoghue, University of Reading
Mark Whitehead, University of Glasgow
Eloy de Lera Acedo, University of Cambridge
James Nightingale, Newcastle University
Jaime Norman, University of Liverpool
Nicola McConkey, Queen Mary University of London
Maria-Theresia Walach, Lancaster University
Matthew Williams, University of Surrey
Danny van Dyk, IPPP Durham
Matteo Agostini, University College London
Daniel Verscharen, University College London
Michèle Levi, University of Oxford
Robert J J Grand, Astrophysics Research Institute Liverpool John Moores University
Jason Hunt, University of Surrey
Stefan Schacht, IPPP Durham University
Mariana A. Fazio, University of Strathclyde
Karolos Potamianos, University of Warwick
Eugene Vasiliev, University of Surrey
Cheryl Patrick, University of Edinburgh
Phil Wiseman, University of Southampton

**Royal Society University Research Fellows**
Mao Zeng, University of Edinburgh
Dr Alex Keshavarzi, University College London
Marek Schoenherr, Durham University
Dr James Howarth, University of Glasgow
Sebastian Marino, University of Exeter
Florian Beutler, University of Edinburgh
Matthew Walters, Heriot-Watt University
Pablo Poggi, University of Strathclyde
Minoo Kabirnezhad, Imperial College London
Andrew McLeod, University of Edinburgh
Luca Franci, Northumbria University
Heli Hietala, Queen Mary University of London
Stephen Jones, Durham University
Laura Keating, University of Edinburgh
Katherine Pattle, University College London (UCL)

**Other Advanced Fellows**

Henrik Melin, Northumbria University, STFC James Webb Fellow
Emma Beasor, Liverpool John Moores University, Royal Society Dorothy Hodgkin Fellow
Thomas Haworth, Queen Mary University of London, Royal Society Dorothy Hodgkin Fellow (+ ERC consolidator grant)
Kyle Oman, Durham University, Royal Society Dorothy Hodgkin Fellow
Martin Bourne, University of Hertfordshire, UKRI Stephen Hawking Fellow
Marianna Korsos, University of Sheffield, Leverhume Early Career Fellow
Jennifer Carter, Univeristy of Leicester, Royal Society Dorothy Hodgkin Fellow
Oliver Gould, University of Nottingham, Royal Society Dorothy Hodgkin Fellowship

A full list of signatories can be found at `https://advancedfellows-openletter-stfc.github.io/`

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