

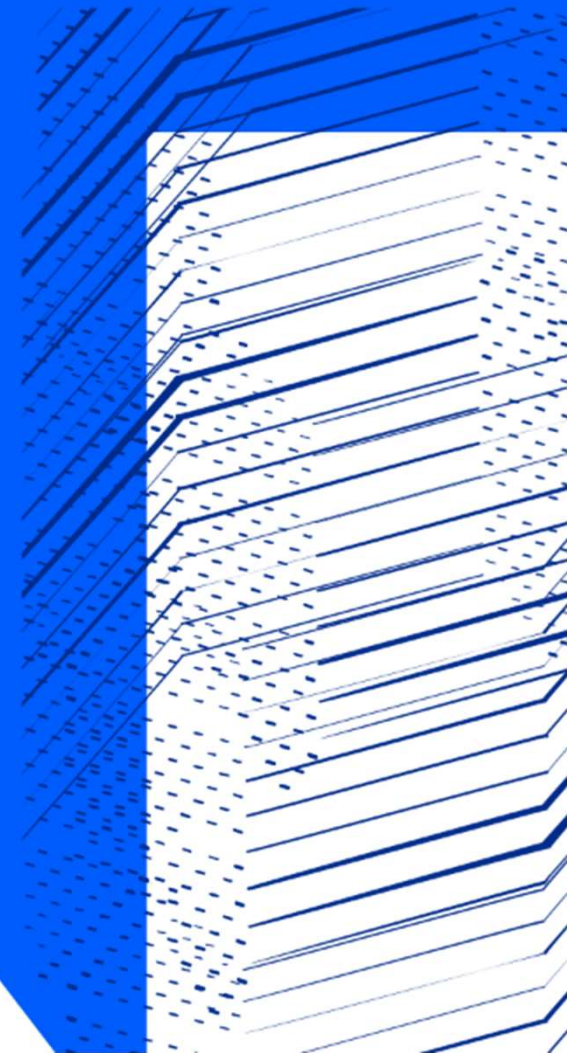


Science and
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Facilities Council

STFC Update APP and HEPP Town Hall

Michele Dougherty & Grahame Blair
Executive Chair Exec Director Programmes

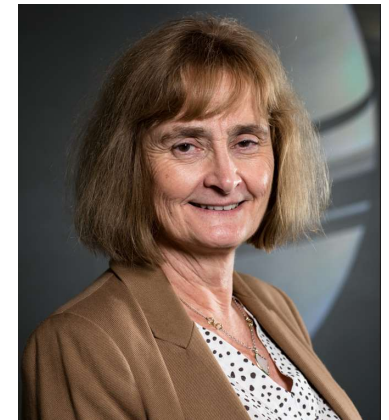
8th April 2025



UKRI Executive

STFC Executive Chair

- In January, I started as STFC's Exec Chair
 - Part of UKRI's Executive Committee
 - UKRI's champion for Infrastructure and Space
 - UK representative on CERN Council and SKAO Council
- I have a 35 yr career as a Space Physicist including:
 - PI for Cassini (Saturn) and Jupiter Icy Moons Explorer (JUICE)
- In addition, I am Institute of Physics President-Elect and President from October 2025
- Former roles include:
 - Head of Department of Physics at Imperial College
 - STFC Council member



First 3 months

Since 02 January (my first day)

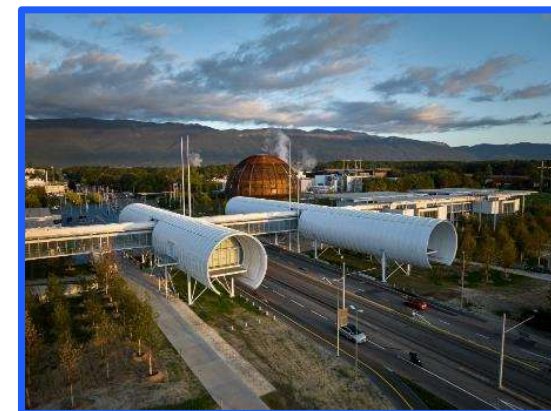
- Visit to CERN and my first CERN Council meeting
 - Impressed by span of UK contributions – critical contributions across breath of CERN activities
- Visit Jodrell Bank and my first SKAO Council meeting
- Strategic meetings with local Universities including Physics department updates
 - University of Manchester
 - University of Liverpool & Liverpool City Region Mayor
 - University of Oxford
- Visit to Daresbury including the update on research into sustainable accelerators and LBNF-DUNE project



CERN: Strategy and Governance

General updates:

- Michele Dougherty is the **new UK CERN Council** delegate alongside Shabana Haque (DSIT)
- Mark Thomson to become CERN DG in January 2026 – STFC is preparing to engage with **new CERN management**
- Eight underground CERN visits delivered including **DSIT Science, Innovation and Technology committee** on 3rd March



UK Strategy for Engagement with CERN 2025 activities include:

- Coordinating activities related to **engineering** and CERN across the UK
- Promoting CERN **training opportunities** to UK technical audiences (with CERN HR)
- Improving the **value proposition** for engaging UK industry in commercial opportunities
- Align CERN engagement to **new government** priorities and ambitions
- Landscape analysis of CERN-related **outreach and public engagement** in the UK

UKRI Executive

CEO UKRI

- Prof Sir Ian Chapman will start as UKRI's CEO in August 2025
- Ian is currently CEO of the UK Atomic Energy Authority (UKAEA) and a UKRI Board member
- He is distinguished physicist:
 - Knight Bachelor in the New Year Honours List 2023 for his services to global fusion energy
 - Fellow of the Royal Academy of Engineering and a Fellow of the Royal Society.
 - His research has been recognised with a number of international awards
- Upon appointment, he said: *“Research and innovation must be central to the prosperity of our society and our economy, so we have the great privilege of shaping the future of the country.”*



STFC Executive

Executive Director National Labs Large Scale Facilities

- Prof Roger Eccleston was appointed Executive Director with effect from 9 December 2024
- He was formerly:
 - Director of ISIS Neutron & Muon Source
 - Deputy Vice-Chancellor (Academic) at Sheffield Hallam University



Chief Operating Officer

- Keith Zimmerman has been appointed at COO and started last week
- He was formerly:
 - Director of a transformation programme at King's College
 - Chief Operating Officer at the University of Bath,



STFC Council Appointments

New Council members

- This month, we welcomed 4 new Council members:
 - Prof David Charlton, Poynting Professor of Physics at University of Birmingham. He is an experienced Particle Physicist and was previously on Science Board (PPAN)
 - Prof Stan Bentvelsen, Professor at University of Amsterdam and former director of Nikhef. He is a scientific lead on Einstein Telescope (Gravitational Waves)
 - Prof Jayne Lawrence, Director of University of Manchester @ Harwell. She is a long term user of STFC facilities and a former chair of Science Board
 - Prof Andrew Pontzen, Professor of Cosmology Durham University. His research interests are the interfaces of astrophysics, high energy physics, cosmology and computation
- We would like to encourage more under-represented groups to apply to all of our advisory bodies and will be issuing calls for new members of Science Board and other boards and panels later this month



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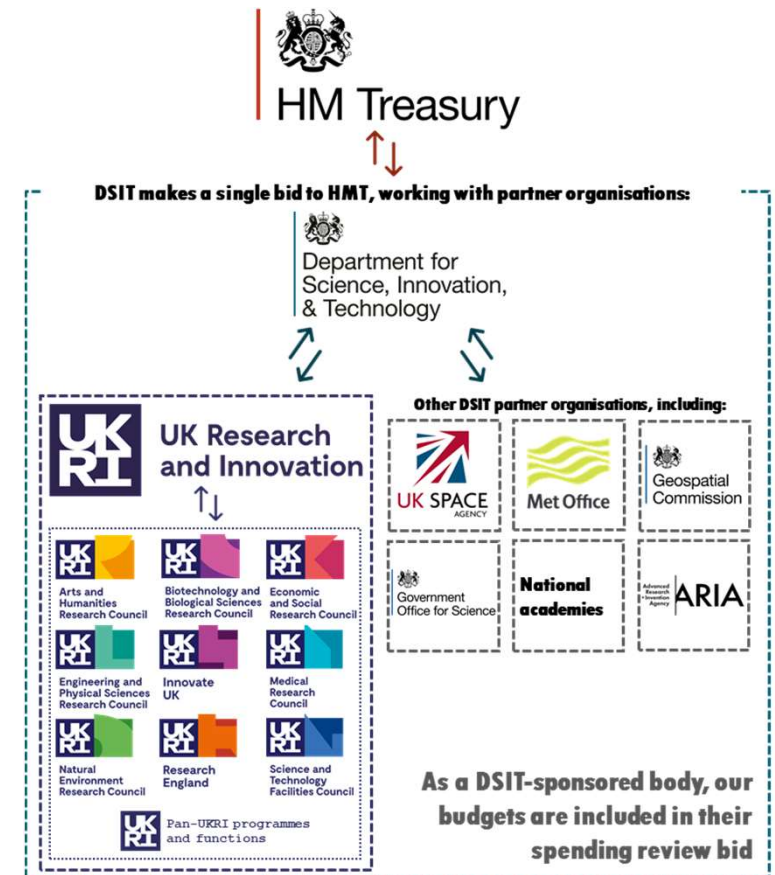
Spending Review



Spending Review

Spending Review process in a nutshell

- Spending Reviews (SRs) are led by HM Treasury
- STFC and the other research councils feed priorities into UKRI, who submits a collective bid into DSIT, along with other public bodies, e.g. the Met Office
- DSIT makes its bid into HMT, which set the department budgets and the allocation process then flows in reverse
- This Spending Review is in 2-phases:
 - Phase 1 – budgets for 2025/26
 - Phase 2 – budgets for 2026/27-2029/30



Spending Review – Phase 1

Headlines for 2025/26 :

- DSIT has announced almost £14 billion of R&D funding, with £8.8 billion budget for UKRI
- We welcome the protection of R&D budgets, particularly as the government is having to make difficult choices to prioritise its spending in the face of more challenging time with constrained budgets across the public sector
- The case for research and innovation is strong given its central role in driving economic growth and improving productivity in the economy and public services
- As we enter a period of tighter budgets, UKRI is working collectively to ensure its portfolio as a whole is balanced to deliver the best outcomes now and in the future
- There are parts of the R&D system that will be disappointed that their ambitions have not been met

Spending Review – Phase 1

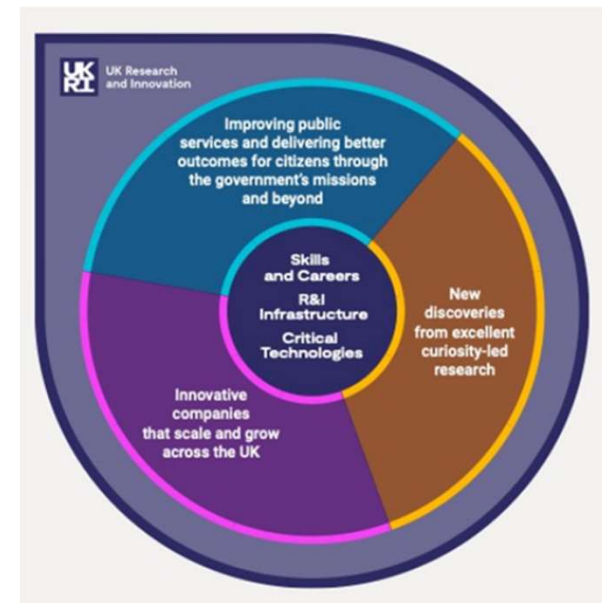
Implications for STFC Funding in 2025/26:

- There are significant pressures and calls on STFC's budget:
 - Inflation has been significant over recent years (over 10% p.a. at times), which has not been matched by increased funding for construction/lab infrastructure
 - Salaries, University overheads and student stipends have all increased
 - Delays (including Covid) and technical challenges have led to increased costs
 - STFC has long-term international commitments backed by MoUs and agreements
- We have had to make some difficult choices to reach a balanced budget:
 - Reduced % success rate for the 2024 Astronomy and Particle Physics grants rounds – with priority given to preserving people, resulting to reductions in capital investments
 - Some projects have not been renewed or are being paused
 - We are committed to reducing STFC's fixed costs including operations national facilities at a reduced rate in 2025 and reducing staff numbers

Spending Review – Phase 2

Status:

- Phase 2 is currently underway with an initial announcement expected this summer
- Recognising the tight fiscal position across the whole of the public sector, UKRI has submitted a realistic flat-real bid, focused on 3 priority areas:
 - £17bn on new discoveries from curiosity driven research
 - £10bn on scaling and growing innovation; and
 - £9bn on citizen outcomes/public services
- However, flat-real will involve some hard choices about what to close, stop or scale back across the UKRI portfolio
 - The impacts will be felt across all Research Councils and our communities



Spending Review – Phase 2

We are committed to ensuring a sustainable future for our research communities

- We cannot continue with everything that we currently fund, but what we do fund must be at a viable level, delivering world class research and technology
- We are currently engaging our Science Boards and Council in a prioritisation exercise to assess the scientific impacts across all our portfolio:
 - Joint meeting of STFC Council & Science Board in March
 - 11 & 15 April extraordinary Science Board Prioritisation meetings
 - 14 May Council Review
 - This will feed into discussions with incoming UKRI CEO and DSIT
- The prioritisation builds upon the recent PPAN roadmap activity – a **big thank you to everyone** in the community who has contributed to this extensive process



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PP and AP Programme Update



Particle physics programme

Particle Physics Experiment Consolidated Grant (CG)

- The CG funds:
 - Core posts (key, underpinning skills for running and planned experiments), responsive posts (exploitation, M&O, technical effort), support staff, academic research time, Small Research Facilities (SRF), consumables/travel/equipment
 - Supports the UK maintenance and operations (M&O) of major international experiments in which the UK has invested.
- Submission deadline February 2024 and reviewed throughout 2024.
- Change from a three-year to a four-year grant cycle and using TFS – funding to September 2029.
- **17 proposals were received, supporting 18 university groups, and 23 experiment submissions. The total request was £280M** (excluding equipment).
- This round included proposals to support the coordination of large-scale R&D activities.
- [Particle Physics Grants Panel](#) chaired by Professor Mitesh Patel, Imperial College London
- **All proposals were of high-quality and deemed “fundable” with many excellent cases in all of STFC’s exciting particle physics and particle astrophysics science areas.**

Particle physics programme

The financial situation has changed significantly since the PP CG funding opportunity opened that has meant STFC has had to make difficult decisions to meet the funding level.

- Careful consideration has been taken to mitigate the impact to the community and additional advice has been provided by Science Board PPAN in the resultant outcomes.
- The 2024 CG has been modified in response to the constrained budget, with priority given to funding our researchers and meeting STFC's international commitments, therefore:
 - the CG award will be two years in duration from October 2025 to September 2027
 - non-core effort will be awarded for 18 months, core awarded for two years
 - academic time remains at 4%
 - travel and consumables has been maintained at current level
 - M&O awards are for two years
 - no equipment awarded at this time
 - no provision is made for new applicants or for conferences and short courses

A further review will take place during 2025 to provide guidance on the award from 2027 to 2029. Beyond 2029, the intention is still to award the CG on a four yearly cycle thereafter.

FAQs...

When will the awards be issued?

- Project Leads (PLs) have received their grant announcement letter and feedback. The awards themselves will be announced in due course in TFS. We thank the community for their patience.

What does this mean for my university group?

- University groups can request no-cost extensions up to 31 March 2026 to help manage the transition from the current grant to the new. This provides universities with flexibility to manage the funding for PDRAs (according to the standard T&Cs). Please contact STFC if you require an extension beyond April 2026.

Does this mean another full PP Experiment CG round in 2027?

- We will run a light touch process to award funding from October 2027, that minimises the workload for the community, panel and STFC.

What further guidance will there be from STFC?

- The review process is in development. Guidance will be provided on how the future CG will be reviewed, that aligns with STFC's priorities for the PPAN area.

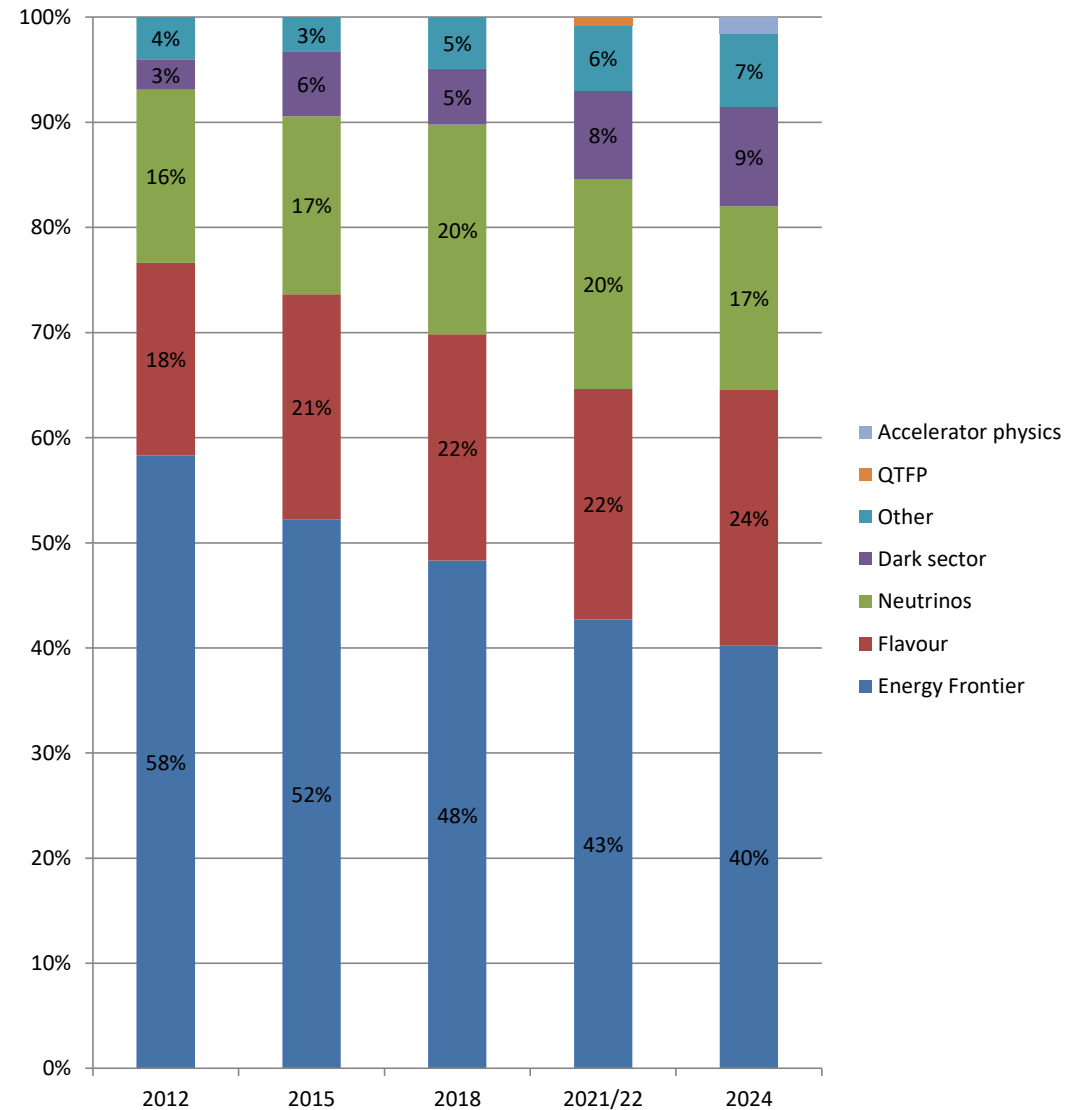
I have further questions...

- We have received a number of queries since the CG announcement and these will take time to answer, we apologise for not having replied directly to you all yet. If you have further queries please contact Sarah Verth, Karen Clifford or Jane Long.

PP CG overview

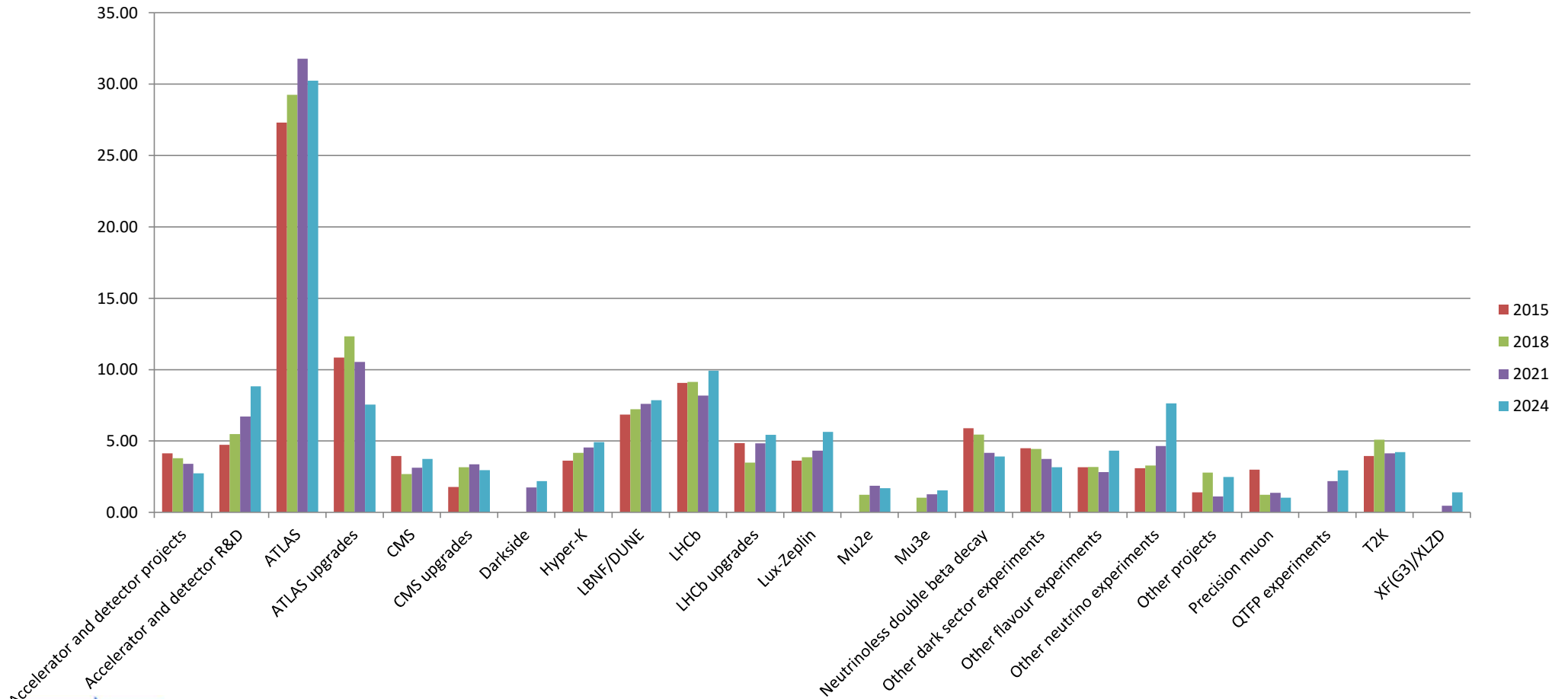
- The UK particle physics programme remains broad but is evolving due to the priorities and phases of the projects within the science areas.
- Maintaining a broad programme is important but challenging in the current funding environment.
- Very difficult to balance new and existing activities within the budget.
- **Energy-frontier physics** remains a high priority with the upgrades coming to completion.
- **Quark-flavour physics** remains highly rated
- UK maintains a leading position in **neutrino physics** with a focus on long-baseline experiments
- **Dark Sector** continues to increase
- Not possible to absorb effort from the **QTFP** programme.

Awarded FTE by Science Area



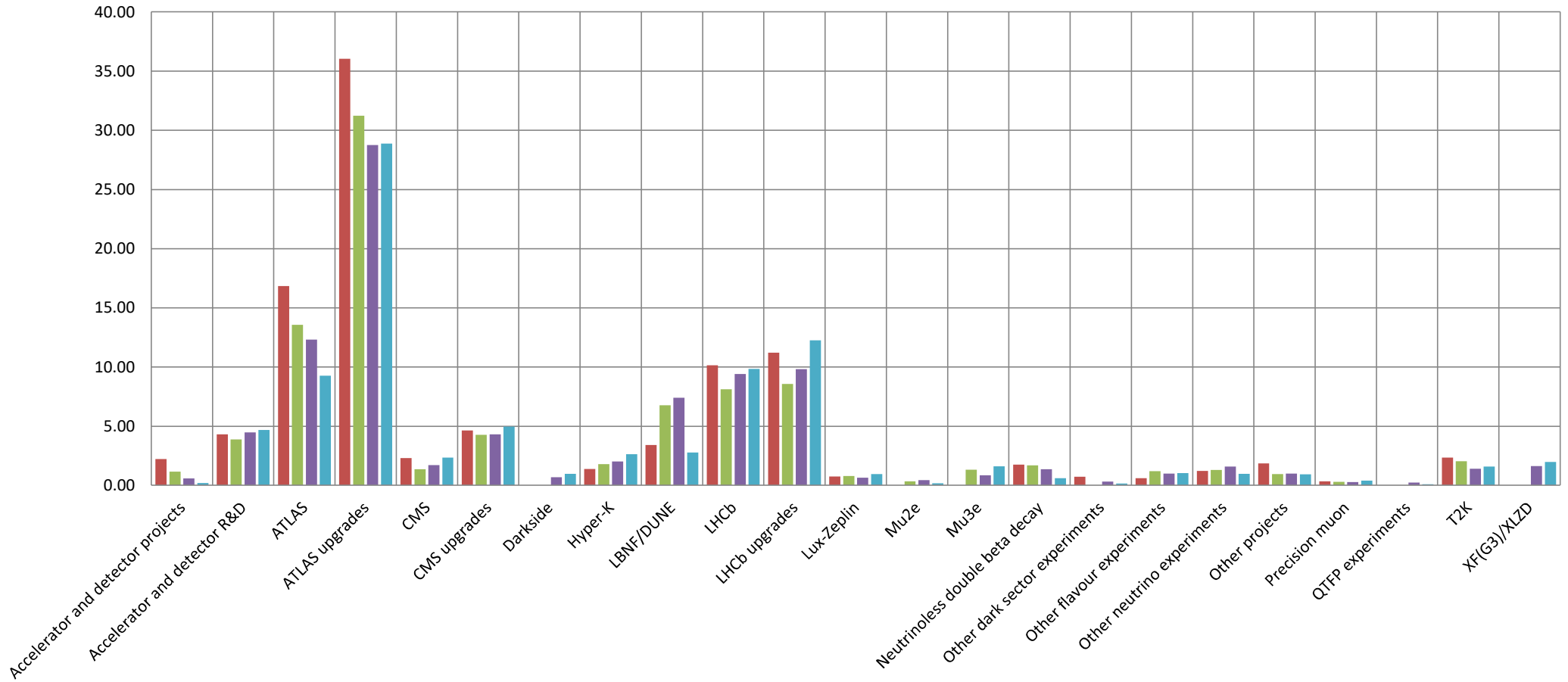
Trends and statistics: academic FTE

Awarded academic FTE by experimental area



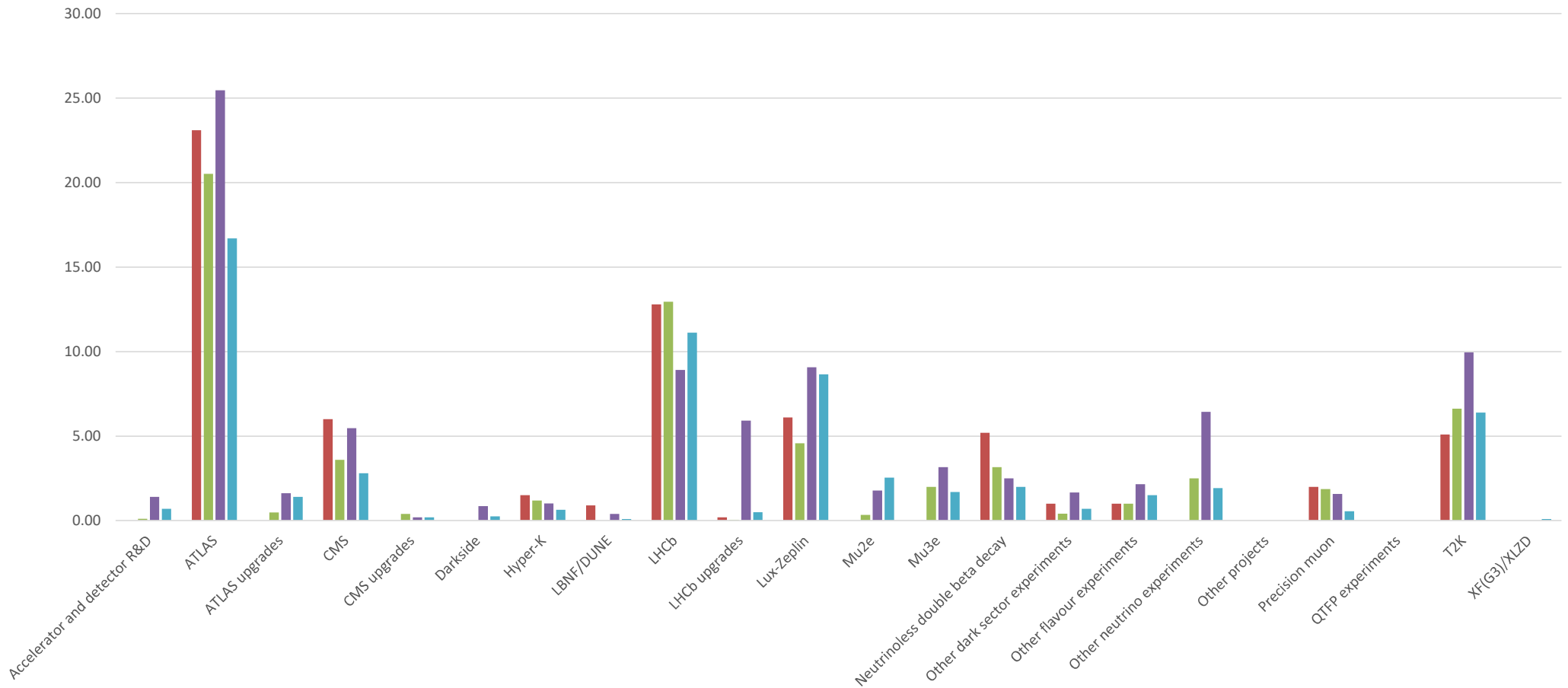
Trends and statistics: core FTE

FTE of core posts by experimental area



Trends and statistics: non-core FTE

FTE of non-core posts by experimental area



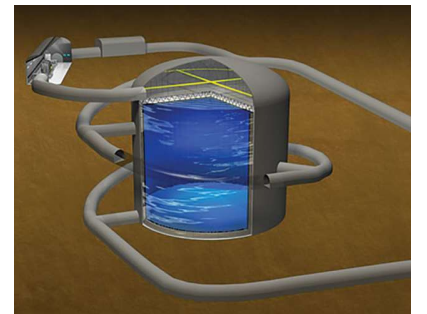
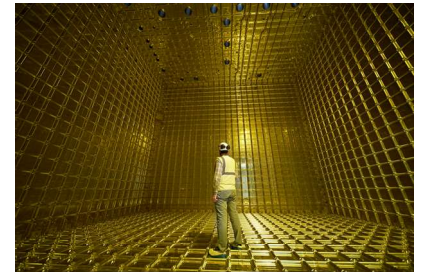
Particle physics programme

Highlights 2024/25

- **CMS Phase II Upgrade construction** – awards finalised for two-year period
- **DUNE** project separated into three projects DUNE APA, DUNE RS&DC and DUNE DAQ from 2024 onwards.
- **DUNE DAQ** awards finalised for a two-year period.

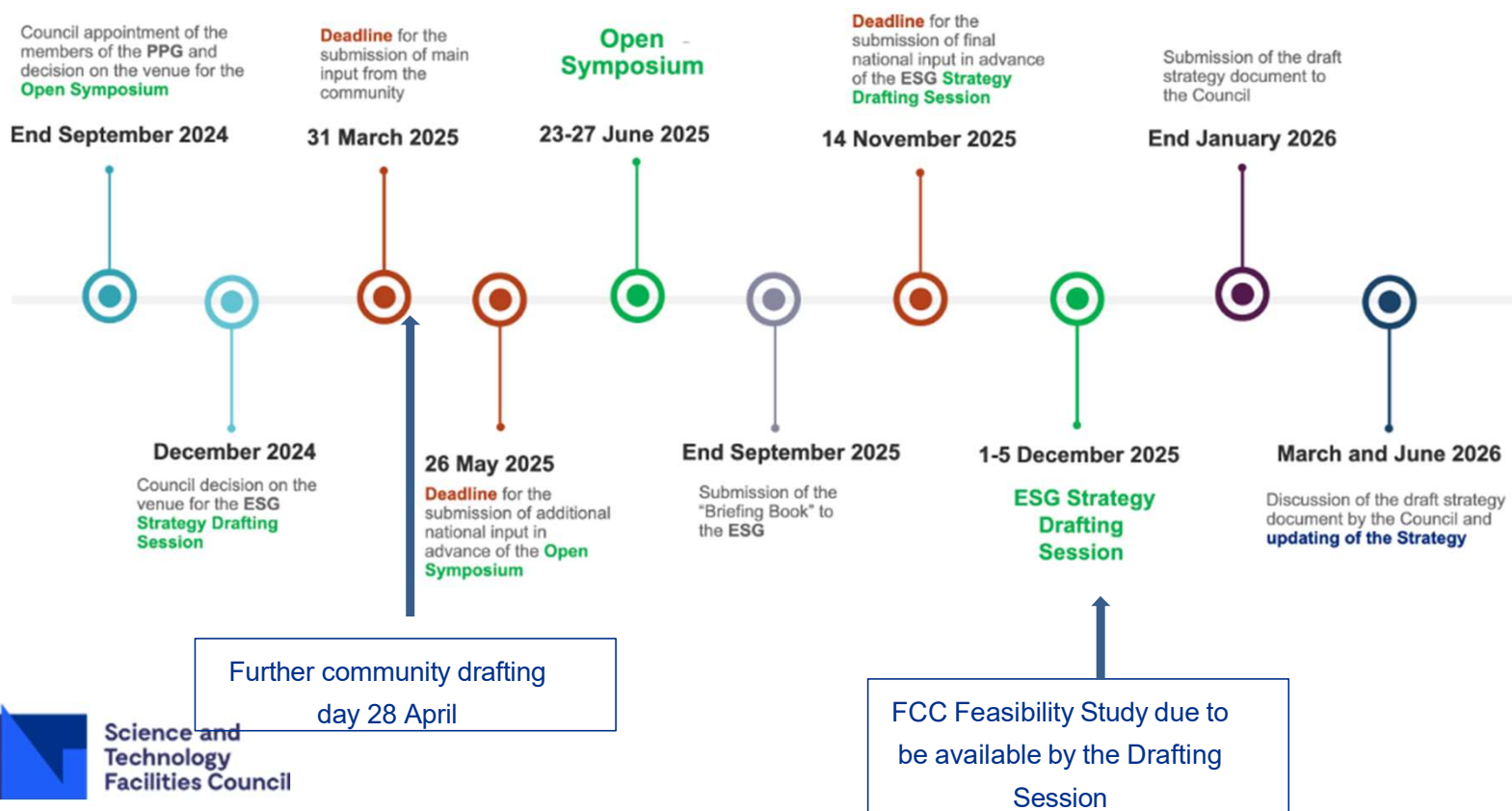
Coming up 2025/26

- **ATLAS Phase II upgrade construction** – PPRP meeting later this month.
- **DUNE APA** project peer review for national laboratory allocation in May.
- **LHCb Upgrade 2** - £49.5M IF over 10 years covering pre-construction to 2026, then construction.
 - **Outline Business Case in development** – essential for the release of IF funding
 - **Peer review scheduled for October 2025.**
- **Hyper-Kamiokande** – £15.5M UKRI IF supported. PPRP meeting in June for final two years of construction.
- **IPPP core programme** – review of IPPP national programme activities.
- **Particle Physics Theory consolidated grant** – budget reduced in line with grants across PPAN.



European Strategy for Particle Physics

CERN Council has approved the timetable for the next European Strategy for Particle Physics Update



Many thanks to the PPAP and the community for their coordination and efforts!

Accelerator science programme

- **Accelerator Institute Grants:** The Cockcroft and John Adams accelerator institute grants have been announced for the period April 2025 to September 2028.
 - STFC (with advice from SB PPAN) have prioritised the accelerator institutes to maintain the university involvement in the field in a highly constrained financial environment.
 - It has therefore not been possible to fund the next phase of **HL-LHC** and **AWAKE**.
- **CESA** - Collaborative Agreement signed with CERN to support the technologies that will make future particle accelerators significantly more sustainable.

We recognise that funding opportunities are limited in the short term

- STFC is undertaking an **International Review of Accelerator Science** that will build on the wider prioritisation exercise. The details will be communicated in due course.
 - The aim of the review is to review of STFC accelerator activities and priorities, current and future, in both programmes and national laboratories and facilities.
- **Future aspiration:** This is subject to the outcome of the prioritisation process/international review and will be viewed in the light of wider developments such as the European Strategy for Particle Physics.



STFC Executive Chair, Professor Mark Thomson and CERN Director General, Professor Fabiola Gianotti committed to collaborate on the research and development of advanced new technologies

Computing and e-Infrastructure

- **DiRAC** - DiRAC-4 science case has recently been externally peer reviewed. Resource Allocation Committee - peer review of RAC17 proposals is complete, computing allocations to start April 2025. RAC18 to be launched in due course.
- **GridPP** - funding constraints have meant restrictions on hardware procurement. We may fall below the UK pledge in future years but are working actively with the collaboration to mitigate where possible.
- **SWIFT-HEP** - supports software development for the HL-LHC era however it is not possible to support the second phase of the project going forward.
- **AIRR (AI Research Resource)** - £7.5m has been allocated from the UKRI DRI fund for the new AI Research Resource (Dawn) at Cambridge for operations from April 2024 - March 2028. Isambard-AI (£243.5m) will also be coming online line in 2025.
 - A call for expressions of interest to get access to AIRR is now open:
<https://engagementhub.ukri.org/ukri-infrastructure/airr-eoi/>
- **New Computing Advisory Panel (CAP)** - is being set up to replace the STFC e-Infrastructure Advisory Group (SEAG). The recruitment process is underway.



Home > News > AI Research Resource funding opportunity launches

AI Research Resource funding opportunity launches



24 January 2024

A funding opportunity to support new advanced supercomputers for artificial intelligence (AI) research launches today.

Quantum Technologies for Fundamental Physics (QTFP)



- A programme funded by the UKRI Strategic Priorities Fund (SPF), run jointly with EPSRC.
- Applies the latest advances in quantum science and technology to explore and answer long-standing research questions about the universe and its evolution. The first programme entailed:
 - £32m for 7 large consortia over 5 years
 - £6.3m for 17 small projects over 2 years
- Programme is currently bridged to Sept 2025 only, from STFC core funding.
- Awaiting outcome of SR Phase 2 for Quantum Technologies. If favourable a call for large consortia awards to start on 1 April 2026 will be issued.
- If no dedicated funding from SR phase 2 then, like all other programme areas, QTFP is under consideration within the prioritisation exercise.

Particle Astrophysics

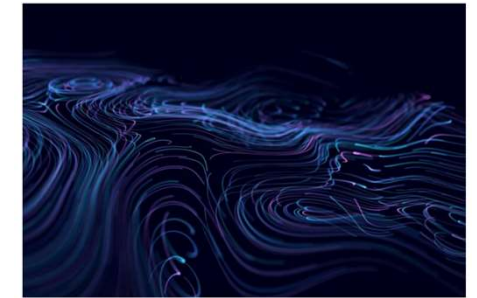
Gravitational Waves

- the CG award will be awarded from Oct 2025 to Sept 2027.
- UKRI IF Preliminary Activity (PA): Next Generation Gravitational Wave detector £8m total, which ends Sept 2026.

Dark Matter

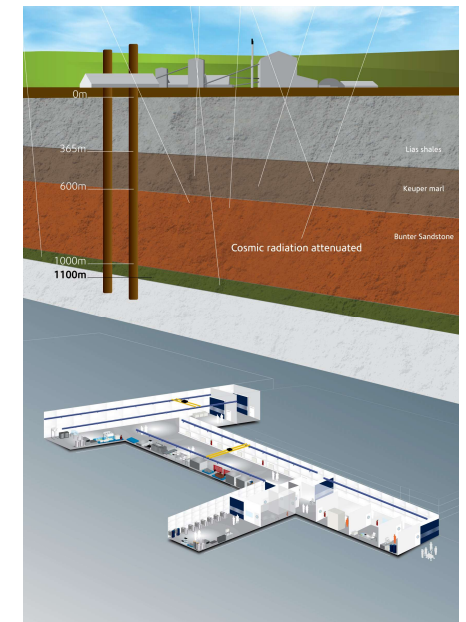
- UKRI Infrastructure Fund Preliminary Activity: XLZD@Boulby (£8m), ends Dec 2027.
- Silicon Detector Development for the Low Background Frontier (£1.8m) ends Dec 2026.
- DM experiment at Boulby is subject to PPAN prioritisation exercise.

UKRI Infrastructure Fund supports next-gen gravitational wave detectors



13 December 2023

Seven UK universities supported by the UKRI Infrastructure Fund have launched a new consortium to advance gravitational wave research.



Doctoral Studentships and Stipends

Update

- UKRI has announced uplifts to the minimum PhD stipend level, (the latest increase from October 2025 is an increase by 8% to £20,780 per year) and has updated our terms and conditions in response to the New Deal work.
- STFC response
 - STFC has maintained landscape (DTP) numbers for 2025 starts but given these increases and our overall financial position we may need to reassess our numbers going forwards.
- We are working with our ETCC advisory group to develop a new algorithm for landscape (DTP) students to allow the changes for astronomy grants to be incorporated and reduce bureaucracy

Fellowship Programmes

The main fellowship programmes for STFC community are:

- Ernest Rutherford Fellowships (STFC):
 - A large number of applications received (again) this year (168 applications). Panels took place at the end of March and interviews will take place at the end of April.
Many thanks to colleagues for their help in peer review.
- UKRI Future Leaders Fellowship
 - Round 9 applications received and sifted. Interviews will take place in May.
 - Round 10 has opened with a closing date in June.
- Discussions are taking place on a more common fellowships framework across UKRI



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Outlook



Outlook

The environment is currently uncertain on many levels but:

- The PPAN programme remains strong and world leading:
 - Strong scientific leadership across the PPAN Area.
 - Excellent community with high quality ECRs and students.
- We are well prepared to weather the current uncertainty
 - Strengthened Science Boards now up and running for over a year.
 - Over a year of background preparation in developing a prioritised Roadmap.
 - Strong input from Advisory Panels as basis of up-to-date portfolio analysis.
 - New planning tools in place based on a well-structured 10-year plan.
 - Strong community participation in the EU PP Strategy update.
- Great opportunities for joint evolution of our programme, together with our international colleagues, including CERN via the UK-CERN strategy.



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Questions?