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# STFC annual town meetings

**Professor Mark Thomson**

STFC Executive Chair

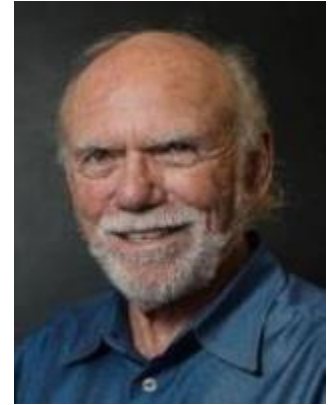
March - April 2018

# STFC Executive Chair: Mark Thomson

- Took up the role this week
- Professor of Experimental Particle Physics
  - Have held national and international research leadership roles
- Previously co-leader of the Deep Underground Neutrino Experiment (DUNE), a collaboration of over 1000 scientists, working towards the construction of a major new project in the US



# Recent Highlights



The UK continues to achieve scientific success on the global stage

Our Impact Report 2017 showcases impact on the UK research and innovation landscape over the past decade and marks 10 years of operation at Diamond Light Source, 40 years at the Central Laser Facility, 50 years at Chilbolton Observatory and 60 years at Rutherford Appleton Laboratory



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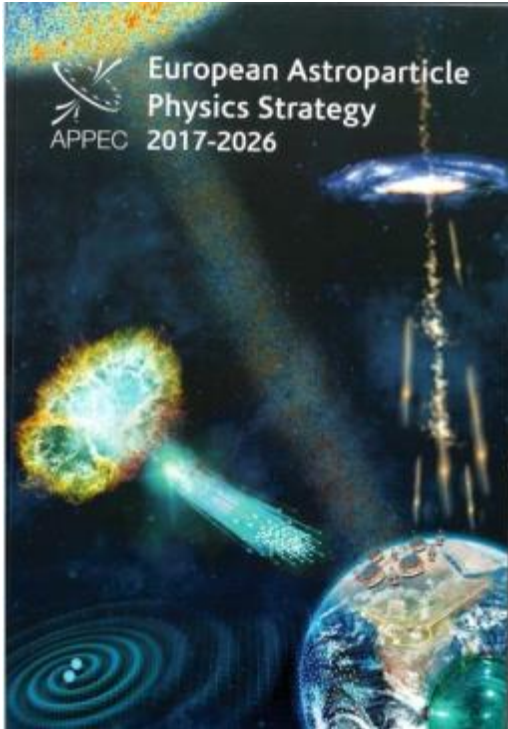
# DUNE/LBNF investment



- The US-led DUNE/LBNF project will undertake a game-changing programme of neutrino physics targeting big science challenges
  - STFC is investing £65 million as part of the \$500 million international project
- UK has secured key leadership roles
  - Stefan Soldner-Rembold (UoM) appointed co-spokesman, succeeding Mark Thomson



# APPEC Roadmap



The Roadmap makes 21 strategic recommendations for the astroparticle physics community ranging from multi-messenger astronomy and neutrino physics to dark matter and gender balance.

- Successful launch of APPEC European Astroparticle Physics Roadmap in Brussels
- Hard copies of the roadmap and shorter versions available
- Contribute APPEC news or announcements and sign up for updates [Corinne.Mosese@stfc.ac.uk](mailto:Corinne.Mosese@stfc.ac.uk)

 @astroparticle

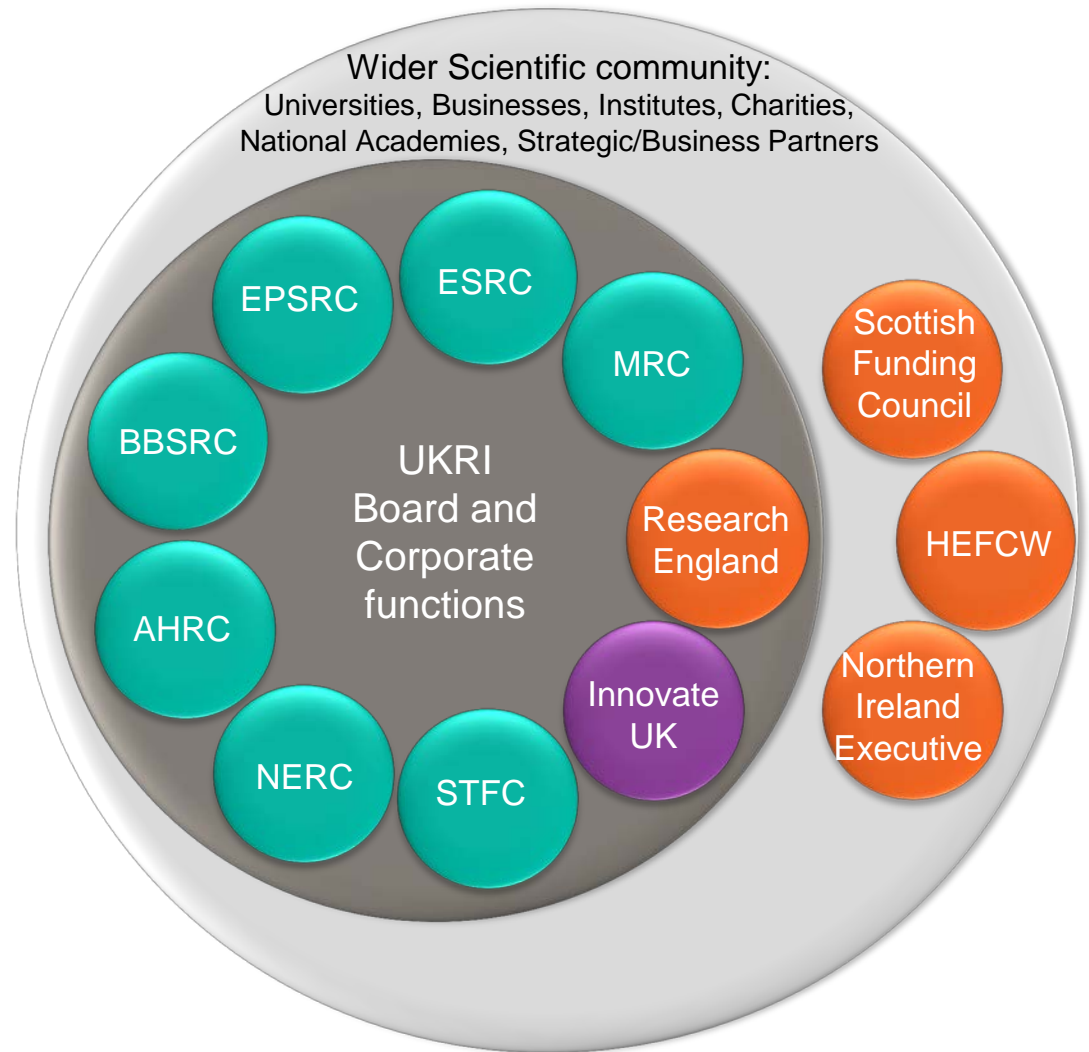


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# UK Research and Innovation

UK Research and Innovation starts 1 April 2018 as the new funding organisation for research and innovation in the UK.

It brings together the seven UK research councils including STFC, Innovate UK and a new organisation, Research England which will work closely with its partner organisations in the devolved administrations.





# UKRI Board



Sir John Kingman  
Chair, UKRI



Professor Sir Mark Walport  
Chief Executive Officer



Ian Kenyon  
Chief Finance Officer



Sir Peter Bazalgette



Professor Julia Black



Professor Sir  
Leszek Borysiewicz



Lord John Browne



Professor Sir  
Ian Diamond



Fiona Driscoll



Professor Alice Gast



Sir Harpal Kumar



Professor Max Lu



Vivienne Parry



Mustafa Suleyman



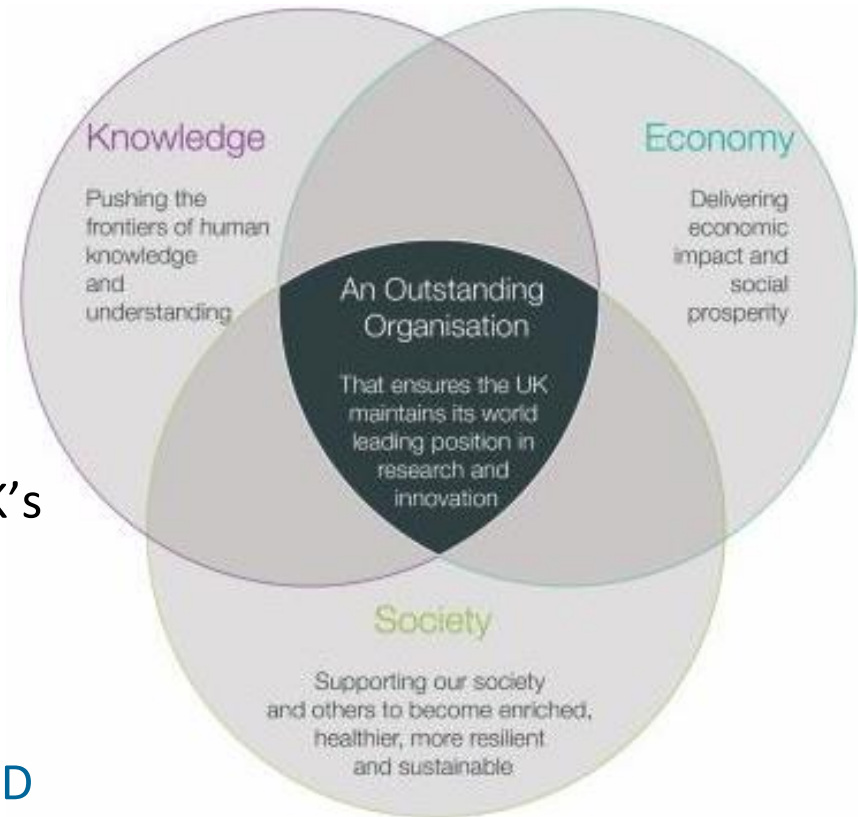
Lord David Willetts



Professor Dame  
Sally Davies

# Preparation for UKRI

- Strengthened strategic approach to future challenges
- Unified voice for the UK's research and innovation system
- Smoother pathway for innovation
- More time for research and innovation leaders to focus on strategic leadership
- Improved quality of evidence on the UK's research and innovation landscape
- Immediate Priorities:
  - Finalise detail and commence successful delivery of additional R&D funding starting from 18/19
  - Engaging stakeholders to create a well informed roadmap to reaching 2.4% of GDP investment in R&D by 2027



UK Research  
and Innovation



# Financial landscape

Overall funding for research and innovation is seeing a significant uplift

- Autumn Statement 2016 provided an extra £4.7bn in total from 2017 to 2021
  - Budget increase of £2b from 2020/21
- Autumn Budget 2017 added a further £2.3 billion for 2021/22, effectively 'baselining' this uplift
- Commitment to increase total share of GDP spent on R&D to 2.4% by 2027 could translate to £10 billion pa by 2027/28



# 2017/18 finance

## International subscriptions:

- Currency fluctuations recognised and funded (~£30m pa)

## Major Facilities:

- Review recognised international leadership and efficiency of operation (Diamond, ISIS, CLF) – uplift of £10m p.a. to reverse previously expected savings

## Talent:

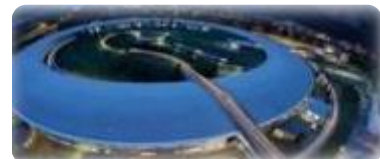
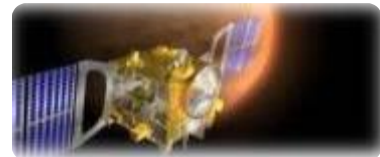
- Launch of Data-Intensive CDTs (£10m)
- Support for Impact Acceleration Accounts (£2.2m in 2017/18)

## Capital Investment:

- Reversal of 40% cuts to World-class Labs
- National Satellite Test Facility (£99m), Rosalind Franklin Institute (£100m), Faraday Institute (£55m), DUNE (£65m)

## Core :

- Urgent e-infrastructure funding (£3m) in 2017/18



# Immediate Pressures

- The new budget investment is being made through directed funds
  - STFC allocation remains flat-cash from 2016/17 to 2019/20
  - We are continuing to make the case for an uplift
  - Requires a joint effort to ensure we can seize new opportunities
- Annual £12.3 million resource gap and £17.6 million capital gap by 2020/21
  - Potential additional allocation of £5m in 2018/19 and 2019/20 to protect international commitments and early R&D
  - Capital bids for urgent e-infrastructure for 2018/19 and 2019/20, CLARA FEL test facility and reversal of reduced capital allocations for 2019/20 and 2020/21 under consideration by UKRI/BEIS



# Programme pressures

- Our Programme has survived largely by big projects moving downstream (E-ELT, LHC upgrades), but can't continue forever
  - Strategic reviews to tension the programme (LHC Upgrades, Neutrinos, Phenomenology)
  - Sub-optimal funding , PRD cancelled
- Need to increase our success in ISCF and GCRF
- BEIS and UKRI understand our flexibility is now very low



# Financial opportunities

- Global Challenges Research Fund (GCRF)
  - Up to £200m of the £1.5bn total collective fund unallocated
- Industrial Strategy Challenge Fund (ISCF)
  - Wave 2 challenges launched, open call for Wave 3 ideas
- Strategic Priorities Fund (SPF)
  - £755m over three years, bids from any BEIS-funded R&D organisation
- Talent Fund
  - 950 AI studentships available over five years from 2019
  - New Future Leaders Fund – 1<sup>st</sup> call deadline 3 July, with mandatory Expression of Interest required by 7 June
- Strength in Places Fund
  - £115m over three years for collaborative bids between research organisations and business to support regional growth
- More announcements expected

[www.ukri.org/funding](http://www.ukri.org/funding)



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# STFC additional calls

- Opportunities Call
  - To pump prime activities that will position university groups to participate in interdisciplinary science that align with GCRF, ISCF and other funding schemes arising from UKRI
  - Support for 4-6 month projects that enable the university group or consortia to undertake seed corn type projects
- Capital Call
  - Capital equipment to support the PPAN programme and to develop its External Innovation capabilities.
  - Available to support programme activities, proof of concept type research, early prototyping and laboratory demonstrations etc.

**Opening Date: 10th April 2018**

**Closing Date: 12th June 2018**

[www.stfc.ac.uk/funding/research-grants/funding-opportunities/funding-calls/](http://www.stfc.ac.uk/funding/research-grants/funding-opportunities/funding-calls/)



# Brexit

- Real concerns over funding and skills
  - Refining for Government a comprehensive view of the importance of EU Framework programme funding for PPAN communities
  - Importance of international collaborations are recognised
- The government has issued a document to clarify the UK's eligibility to participate in Horizon 2020 and its commitment to underwrite bids
  - The full document and Q&A available at [www.ukro.ac.uk](http://www.ukro.ac.uk)



# Research Infrastructures Roadmap

- Sponsored for UKRI by STFC Executive Chair
- Roadmap will:
  - Identify research and innovation capability needs (to ~2030) and existing gaps responding to changing R&D and socio-economic demands
  - Assess duplication and areas of reduced priority
  - Develop strategic priorities envisaged for funding
  - Support international negotiations
- Timeframe:
  - Launched in Jan 2018
  - Production of draft roadmap: Oct 2018
  - Event to review draft roadmap: Nov 2018
  - Formal issue of roadmap: April 2019



# STFC Appointments

- New Council announced 23 March
- Legacy Council
  - Existing Research Councils continue as legal entities to 31 October 2018 to support closure of accounts and provide contingency for transition
- Panel opportunities
  - We have vacancies for outstanding individuals to become members of our committees and panels
  - Details on website [www.stfc.ac.uk/panels](http://www.stfc.ac.uk/panels)
  - Closing date is Monday, 9 April



# New STFC Council

- **Professor Isabelle Baraffe** - Chair in Astrophysics, University of Exeter
- **Professor Mike Dunne** - Director LCLS, SLAC (former Director CLF)
- **Mr Dick Elsy** - CEO, High Value Manufacturing Catapult
- **Professor Karen Holford<sup>^</sup>** - Deputy Vice-Chancellor, University of Cardiff
- **Professor Richard Kenway<sup>^</sup>** -Vice-Principal, High Performance Computing, University of Edinburgh (Senior Independent Member)
- **Professor Anupam Ojha** – Director, Education and Space Communications, National Space Academy, National Space Centre
- **Professor David Price<sup>^</sup>** - Vice-Provost (Research) & Professor of Mineral Physics, UCL
- **Professor Sheila Rowan** – Director, Institute for Gravitational Research, University of Glasgow & Chief Scientific Adviser to the Scottish Government
- **Professor David Rugg** - Senior Research Manager, Rolls-Royce
- **Professor Tony Ryan<sup>^</sup>** - Professor of Physical Chemistry and Director of Grantham Centre for Sustainable Futures, University of Sheffield
- **Dr Frances Saunders** – Former CEO Defence Science and Technology Laboratory & Ex-President Institute of Physics
  
- <sup>^</sup> member of current STFC Council



# Skills and Training

- Skills Balance of Programme
  - STFC's skills programme has been reviewed by an external panel in a 3-yearly exercise
  - Input gathered from STFC's community and campus partners
  - Council endorsed the panel report; publication to follow
- 220 doctoral training partnership studentships for 2018 starts allocated in December. Process for 2019 starts is underway and allocations will be announced by the end of the year
- 25 additional studentships from the national productivity investment fund enable all our data science CDTs a second cohort



**Questions?**

