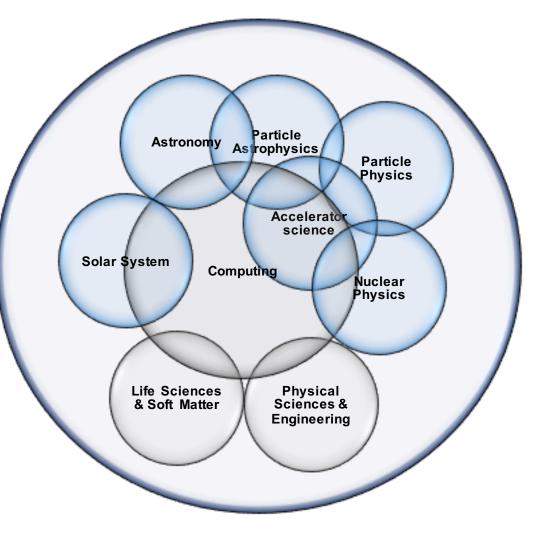
Science Board report

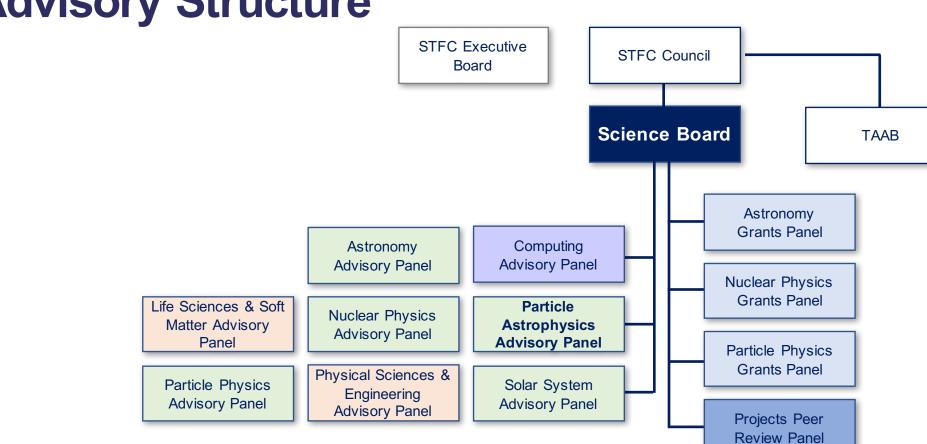
- What we do
- Who we are
- Updates

Tara Shears, for Science Board

Remit

- To provide STFC with a strategic scientific overview and assessment of, and science advice on, all of the programmes STFC supports
- Formulate and update long term science and technology strategies
- Review programmes and investments
- Consult with the communities through advisory panels
- Agree and recommend scientific investment plans against budget
- Provide advice to STFC Council on criteria for selecting projects and science areas
- Provide advice on UKSA programmes





Advisory Structure

Membership

Tara Shears (Liverpool) (Chair) Karen Edler (Bath) (Deputy Chair) Carla Andreani (Rome) Martin Bauer (Durham) Andrew Beale (UCL) Andrew Coates (UCL/Mullard) Gavin Davies (Imperial) George Efstathiou (Cambridge) Keith Grainge (Manchester) Stephen Hayden (Bristol) David Ireland (Glasgow) Martin King (Royal Holloway) Isabel Moraes (NPL) Alex Murphy (Edinburgh) Zulfikar Najmudin (Imperial) Robin Perutz (York)

STFC Office: Karen Clifford

https://stfc.ukri.org/about-us/how-we-are-governed/advisory-boards/science-board/

(new / changed)

Updates

Advisory panel interactions:

• PAAP

Strategic reports:

Balance of Programmes 2

Projects:

- Xenon Futures/Silicon detector development for the low background frontier (PPRP project)
- DarkSphere (Sol)
- Quantum technologies call outcomes seen for information
- Infrastructure prioritisation process

PAAP report

- Science highlights and programme updates
- Concerns: funding
 - We share concerns over very constrained funding throughout the PPAN programme
 - See Balance of Programmes 2 and the PA programme evaluation, for example (next)
 - We have given our concerns over exploitation funding to EB and Council
 - Let's see what the CSR brings.

Balance of Programmes 2

Reminder: PA programme evaluation (2019) input into 2020 Balance of Programmes exercise (3 year rolling programme)

Findings:

- PA programme has minimal breadth and no depth
- PA funding insufficient to maintain programme health
- PA science is vibrant with exciting opportunities ahead

https://stfc.ukri.org/files/particle-astrophysics-programme-evaluation/ https://stfc.ukri.org/files/balance-of-programmes-2020/ https://stfc.ukri.org/about-us/our-purpose-and-priorities/planning-and-strategy/programme-evaluation/balance-of-programmes/

Balance of Programmes 2

(Some) Recommendations (17 in total):

- STFC should maintain pressure for an uplift to core funds (rec.1)
- The UKRI uplift for GW should be baselined (rec. 8)
- Re-introduce PRD-style scheme if funding uplifted (rec. 9)
- STFC should explore possibilities for responsive high risk, high gain project funding (rec. 11)
- "The Panel further recommend that funding for Dark Matter in Particle Astrophysics is increased to £1.5M per year in the last two years of this time period, with funds coming from the inflationary increase across the whole programme." (rec. 17)
- See STFC responses on the website

Infrastructure prioritisation

Background:

- UKRI developed an R&I infrastructure roadmap in 2019
- Cross-UKRI infrastructure fund established to fund major infrastructure priorities (note: infrastructure fund is tied to the CSR outcome)
- First prioritisation exercise ran in summer 2020, with outcomes expected soon

Infrastructure prioritisation

PA inputs:

- Eight infrastructures submitted from PA area (from a total of 53 STFC programme + facility bids)
- Note: quite restrictive criteria for infrastructure timescales, and very challenging process timescales.

Process:

- Advisory panels gave input on projects in their areas
- Science Board prioritised based on (scientific) UKRI criteria
- Recommendations fed to Council (who scored other UKRI criteria) who then advised EB.
- Submissions across UKRI then prioritised by Infrastructure Advisory Committee (recommendations to UKRI board in Jan.)

https://www.ukri.org/our-work/creating-world-class-research-and-innovation-infrastructure/ukri-infrastructure-advisory-committee/

Infrastructure prioritisation

Next steps:

- Many lessons learned from the process (timescales, communication etc)
- Awaiting outcome of 2020 round
- Preparing for potential 2021 round (should have news soon), and developing a longer term approach.

Summary of current issues

Future funding level – what will it be?

What will EU exit/the EU exit deal imply for us?

Main short term business: Infrastructure prioritisation 2