

# Particle Physics Advisory Panel (PPAP) Report

STFC Town Meeting

5<sup>th</sup> April 2022

# Outline

- Introduction
- PPAP Membership
- Recent activities
- Near future

# PPAP



Particle Physics Advisory Panel (PPAP) is one of five STFC advisory panels

‘The purpose of the Advisory Panel is to provide a link between Science Board and the community, and represent the needs of the community to STFC.’

<https://stfc.ukri.org/about-us/how-we-are-governed/advisory-boards/particle-physics-advisory-panel/>

# PPAP role

- Activity is demand driven
- We meet every ~two months at the moment
- Interact with community
  - Annual community meeting
- Respond to requests for advisory information from STFC/stakeholders
  - e.g. provide input to the UKRI Infrastructure bids
- Keep the road map up to date
  - Aim to reflect the activities and aspirations of the community
  - 2021 roadmap <https://stfc.ukri.org/files/ppap-2021-roadmap-final/>

# Current Panel Membership

- **Matthew Needham – University of Edinburgh (Chair)**
- Ben Allanach – University of Cambridge
- Andrea Banfi (Sussex)
- Adrian Bevan – QMUL
- Tracey Berry (Royal Holloway)
- Marco Gersabeck - University of Manchester
- Monica D’Onofrio – University of Liverpool
- Kimberly Palladino – University of Oxford
- Jaroslaw Pastenak – Imperial College London
- Yvonne Peters – University of Manchester
- Ruben Saakyan – UCL

Partial rotation each year of membership each year:  
Consider volunteering for this role  
<https://www.ukri.org/about-us/stfc/how-we-are-governed/advisory-boards/call-for-applications/>

# Thanks

- The last in-person town meeting was in 2019.
- The panel have not met in-person since the Birmingham meeting in September 2020.
- Since then there have been several membership rotations.
- A big thanks to all who served on the panel since 2019
  - Silvia Pascoli, Veronique Boisvert, Jo Cole, Pawel Majewski, Peter Ratoff, Matthew Malek
- Special thanks to Roger Jones who served as Chair from 2019-2021 and led us through the roadmap

# Where were we 3 years ago?

From the last in person town meeting

## PPAP Concerns

- Comments and concerns
  - We are now broad (11 STFC funded programmes, up from 7)
    - Shows creativity and vigor
    - But can it all be sustained?
  - Core funding! Expanding programme by seizing opportunities will make the pressure on the core worse
    - Loss of senior research staff and RAs at universities and in PPD.
    - Increases concern over keeping skills pipeline filled as a consequence of losses.
  - At the risk of update fatigue.....
    - Consequences of the CG will have profound effects on the roadmap
    - Believe an update in ~1 year is appropriate

Where do we stand now?

# The Roadmap

The major work of the panel during 2020 and 2021 was the update to the roadmap document

## PPAP 2021 Roadmap

### Particle Physics Advisory Panel

*B. Allanach, A. Bevan, M. D'Onofrio, R. Jones,  
M. Needham, K. Palladino, S. Pascoli, J. Pasternak,  
Y. Peters, R. Saakyan*

<https://stfc.ukri.org/files/ppap-2021-roadmap-final/>

Thanks to everyone in the community who provided input to the process via the performativa, calls for information and virtual community meetings

As well as the pdf document, all inputs are collated on the PPAP sharepoint space



# The Roadmap

Reminder of overall program recommendations

Recommendation 3.1: The UK must continue to pursue a world-leading particle physics programme, focussed on addressing the internationally acknowledged high priority science questions.

Recommendation 3.2: The core funding of the programme is essential for exploitation and innovation, but has fallen dramatically in real terms over the last decade. STFC and the community must pursue every avenue to increase the core funding in real terms.

Recommendation 3.3: When new projects are initiated, the downstream impact on the core programme must be evaluated. Scenario planning should be used to help ensure the new programmes strengthen the core programme.

Recommendation 3.4: In the case of continued real terms attrition to the funding, STFC should attempt to maintain minimal capability in areas that are otherwise defunded, to allow regrowth at a later stage.

Recommendation 3.5: CERN is the world's leading particle physics laboratory and the focus of most particle physics experimentation in Europe; UK membership of, and support for, CERN is crucial for the UK science programme.

# Beyond the roadmap

Panel has been meeting regularly, main points discussed

- Information gathering: we welcome inputs from the community that will help shape next roadmap or feed into requests for information
  - Web document started to collate these – email us if there are items you want to be captured there.
- Possibility of horizon scanning or sector reviews
- Young career researcher network
- CG outcome is now known: what does the shape of the community look after this?

# Early Career Researcher Forum

This was a suggestion that was made during the roadmap consultation that we adopted as recommendation

**Recommendation 11.1:** An *Early Career Scientist in Particle Physics* Forum should be established by the community to help support and represent the views of the PDRA and PhD students in the UK. STFC should consider the inclusion of PDRA-level representation on its panels.

Discussed further in our meeting. Drafting a proposal

There are ECR issues that fall within the PPAP remit (scientific policy discussions) but there are also wider issues such as career development and welfare that are outside of the PPAP scope

# Early Career Researcher Forum

What can we do to kickstart this process

- An ECR mailing list should be created to complement the existing and broader Hi-Phi mailing list. This will provide a more direct channel to engage the ECR community in meetings and processes such as the roadmap.
- Provide encouragement to hold ECR events. ECR networking event at the Autumn community meeting?
- Strengthen information sharing to ECR community on how the STFC panels and funding system work.

Aim to foster a sense of an ECR community

Goal: help the setting up of a ECR forum, driven by needs of the ECR community

Now coming out of the pandemic seems a good time to do this.

# Horizon scanning

Another point to come out of the roadmap process was to 'horizon' scan

- In process of defining what this means and how process would work
- Have pool of new ideas or priorities to hand for future funding calls
- How many? A bank of around 5 ideas would be something digestable, more would need ranking process
- What big idea means may depend on the area

# PPAP concerns: 2022

- Compared to a decade ago the community is more diverse and widely spread
  - Can this be sustained through the lifecycle of experiments moving from construction to exploitation?
- The 2022 CG outcome is now known.
  - Another tough round and pressures on core funding remain
  - How does this impact the future landscape/skills pipeline?
- Key concern expressed in the roadmap process was the balance between R+D, construction and exploitation phases
  - This question is in the remit of the STFC review of particle physics that is launching

# The future

- Define scope of horizon scanning
- Young career researcher proposal
- Information gathering on the CG outcome
- Community meeting: September, dates soon
- Engage with/support ongoing processes and calls for information
  - e.g. STFC Visions, strategic review
- React to the needs of the community

Questions ?