Quick[*] Summary of PPAP Community Survey

PPAP Community Meeting

Birmingham 25-26 June 2024

PPAP

Andrea Banfi, Tracey Berry, Andy Buckley, Davide Costanzo, Henning Flaecher, Marco Gersabeck, Elena Gramellini, Helen O'Keeffe, Arttu Rajantie, Ruben Saakyan, Rebecca Seviour, Jessica Turner, Sarah Williams

[*] Full version at the Discussion session tomorrow (Wednesday afternoon)

Introductory Remarks

- A survey ran between 10 May and 7 June.
- Results of the survey are **starting point** to consult our community and provide input to Science Board (PPAN) to build a prioritised PP Roadmap
- More discussion will happen at this meeting (summary of discussions will be distributed)
- Please use this Google-Doc to provide feedback on discussions at the meeting, as well as post meeting comments. Note: it can be seen by everyone in the community with the link.
- All this input will be used to answer 9 PPAN Roadmap questions.
    - PPAP will submit answers by 28 August
    - Community will be able to see and comment before answers are submitted
- PPAN Roadmap process is linked to UK input to European Strategy for Particle Physics Update

Thanks to everyone who has filled the survey and will join the discussion today!!!
YOUR FEEDBACK IS INVALUABLE!

Results presentation/methodology

- 2 PPAP members from different science areas read and summarised each survey response.
- Slides provide a quick summary. Take quick summaries with a pinch of salt. They are for illustration and encouraging discussion.
- Extensive summaries are available in this separate document
- More on methodology tomorrow afternoon.

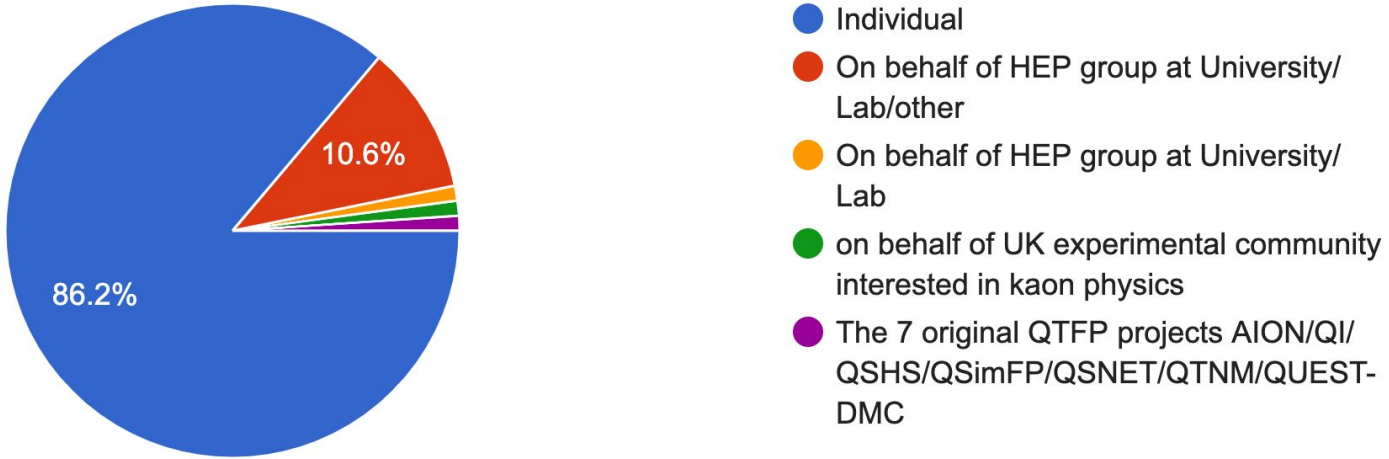
A few examples. More in tomorrow's Discussion Session

Click here to see full survey summary document

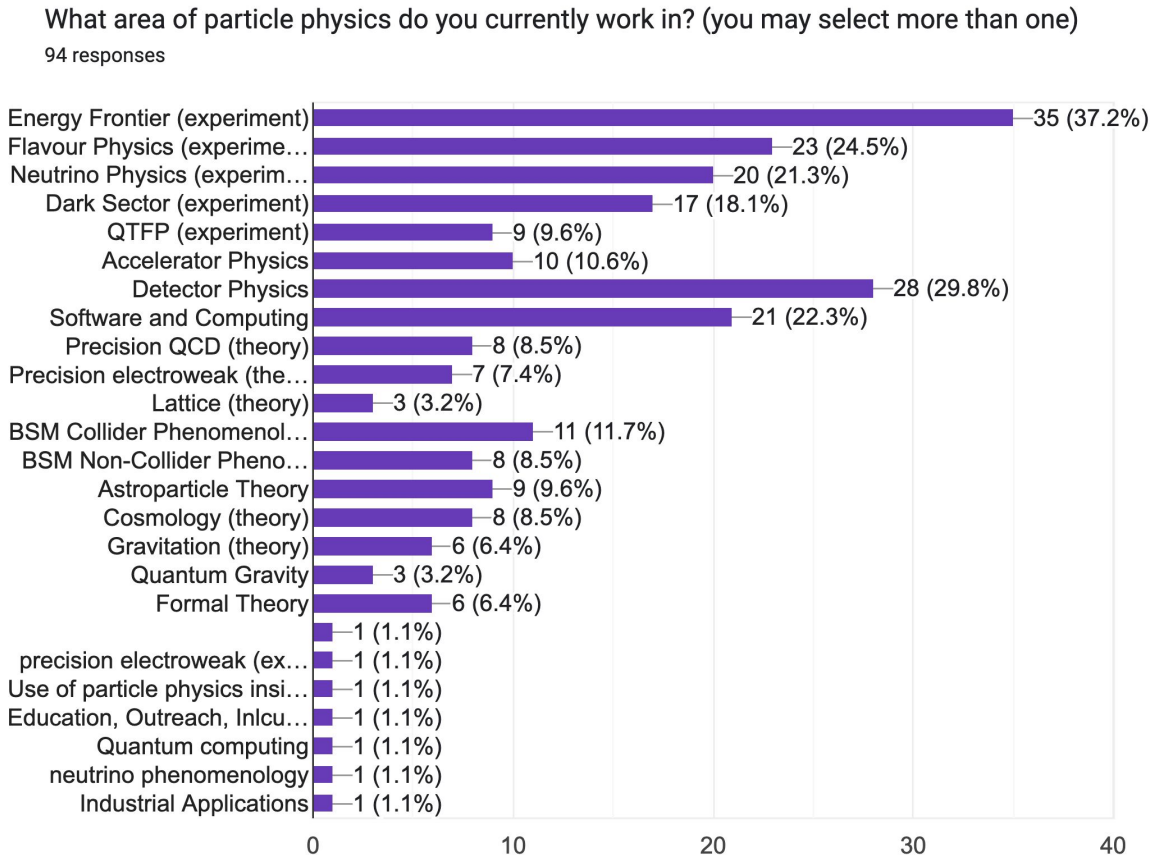
Individual vs Collective Responses

Do you provide this response as

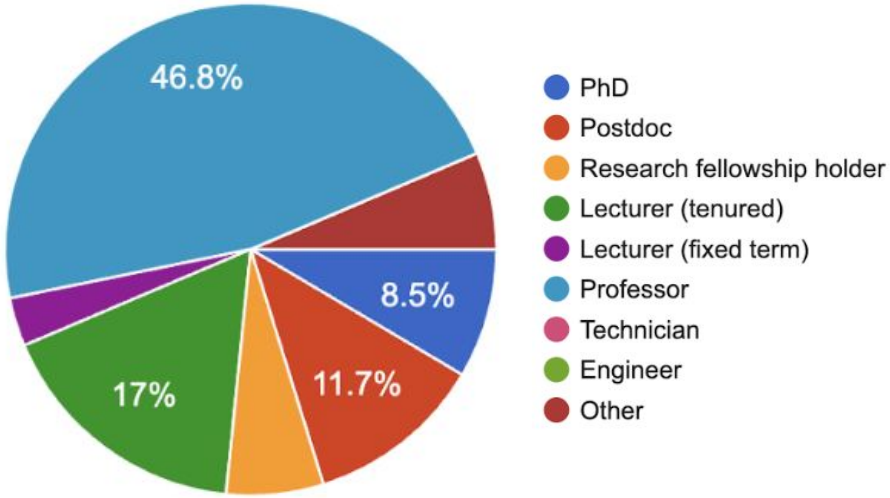
94 responses

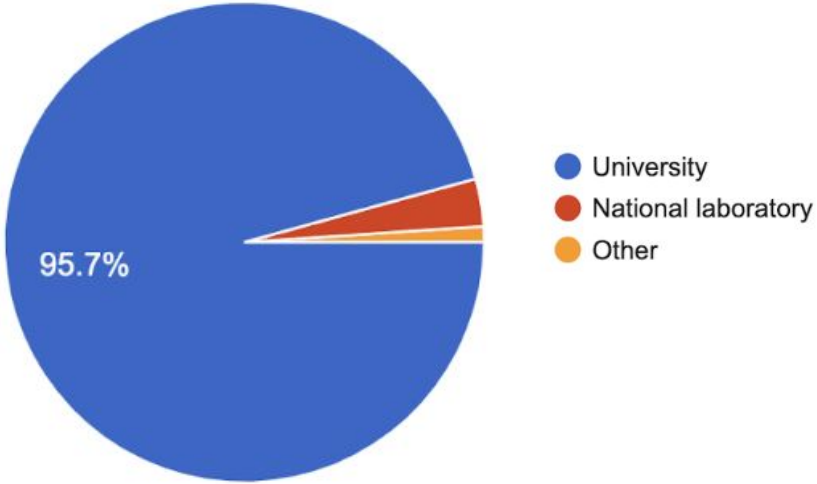


Representation of different areas



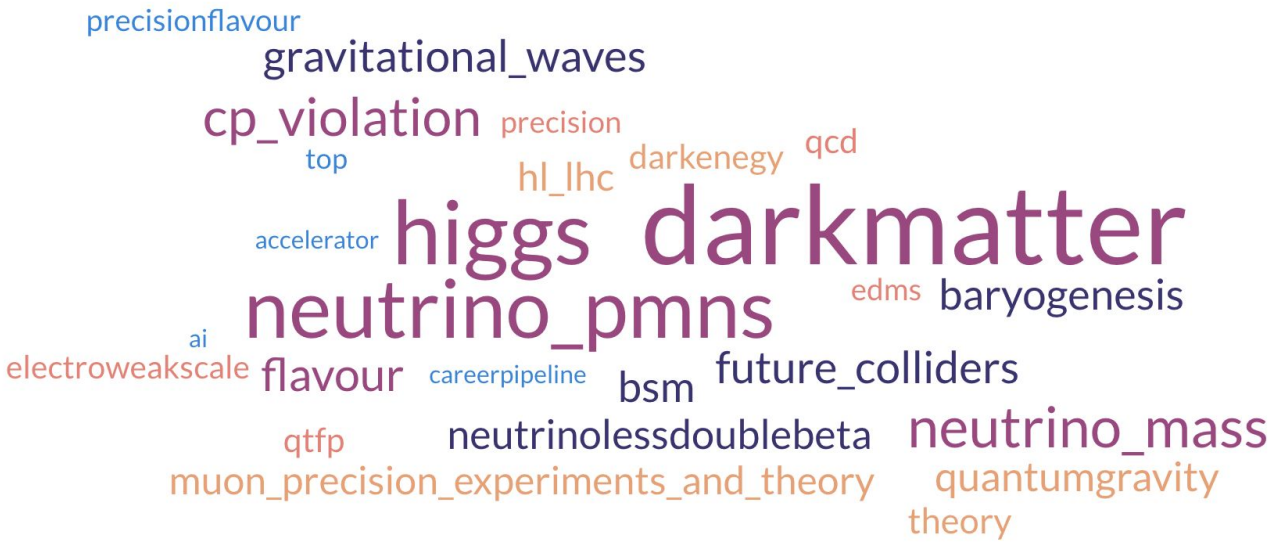
Takers Demographic





94 takers: 28% Early Career vs 72% non-ECR

Top Scientific Challenges



82 responses to the related open question.
Extensive summary here.

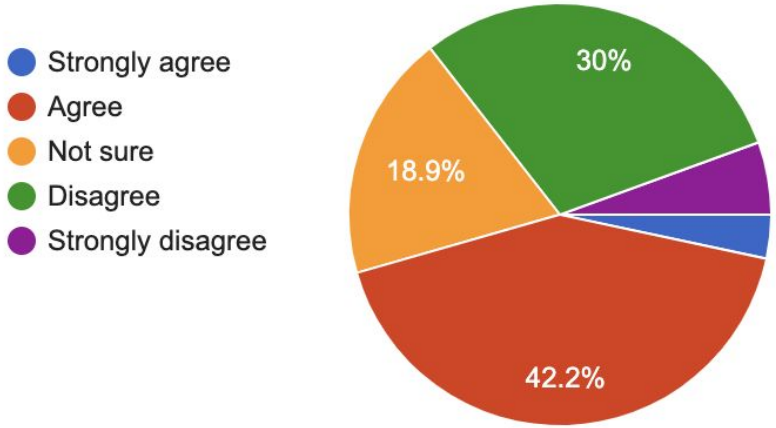
Additional drivers:

- ECR job security.
- Reducing carbon footprint and promoting sustainable research.
- More unified approach and support for public engagement, outreach and D+I
- Utilising AI advances

Science Areas Balance

Do you consider the current Particle Physics programme well balanced between science areas (“Energy Frontier”, “Flavour Physics”, “Neutrino Physics”, “Dark Sector”, “QTFP”, "Detector R&D", "Accelerator Technologies")?

90 responses



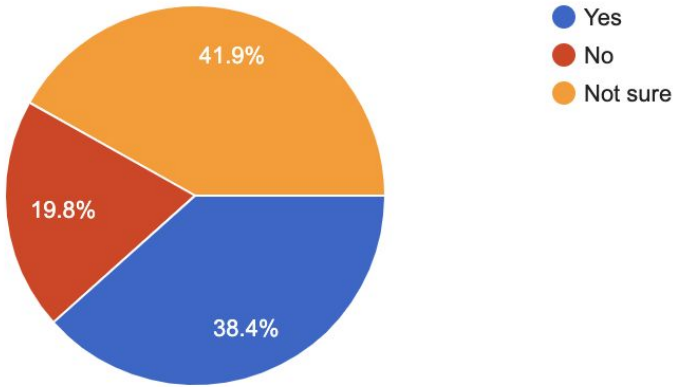
62 responses to the related open question here for a detailed summary.

Additional drivers:
- better metrics for priorities,
- more coherence & focus for the areas
- ERC-support
- Open-Science & D+I.

Updates to the roadmap

Have there been significant developments in the UK particle physics programme that are not captured in Roadmap-2021?

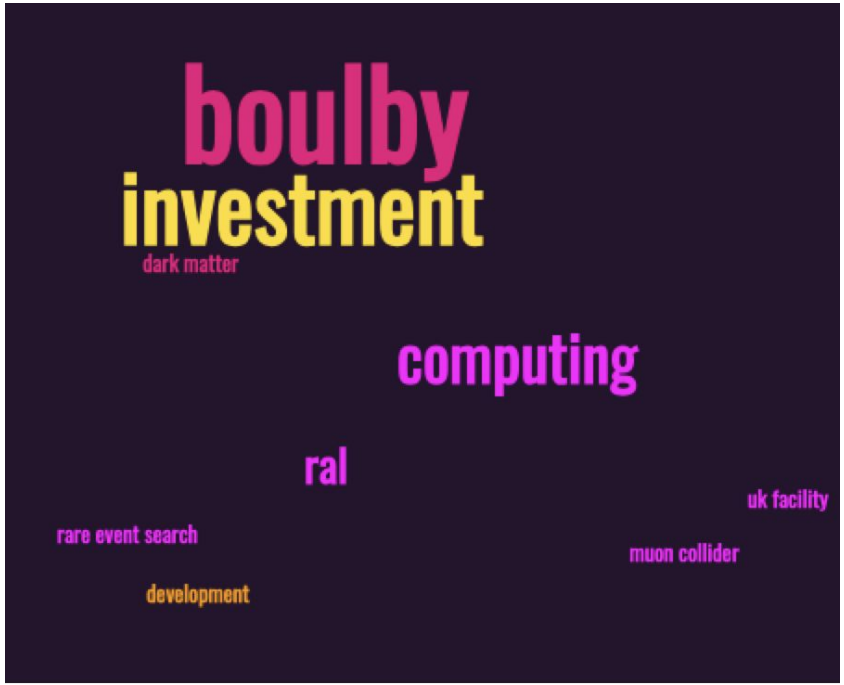
86 responses



Key Topics:

- Boulby Opportunities
- CERN's ECN3 decision
- Scenario planning, especially for large long-term investments.
- Environmental Sustainability
- EIC

Key Infrastructure requirements for short, medium & long term physics programme



Key Topics

Expansion of Boulby lab for DM & and other low background experiments.

Enhanced computing and software resources

Strengthened strategic programme and support for detector R&D. Test beam facilities

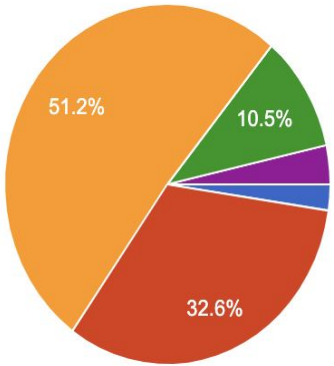
Accelerator R&D with focus on RF sources & magnets

General themes: theory support & sustainability underpins all activities

Accelerator and Detector R&D

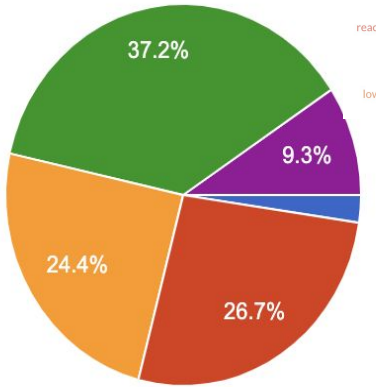
Is the UK investment in the accelerator R&D programme commensurate with its current research portfolio and future aspirations?

86 responses



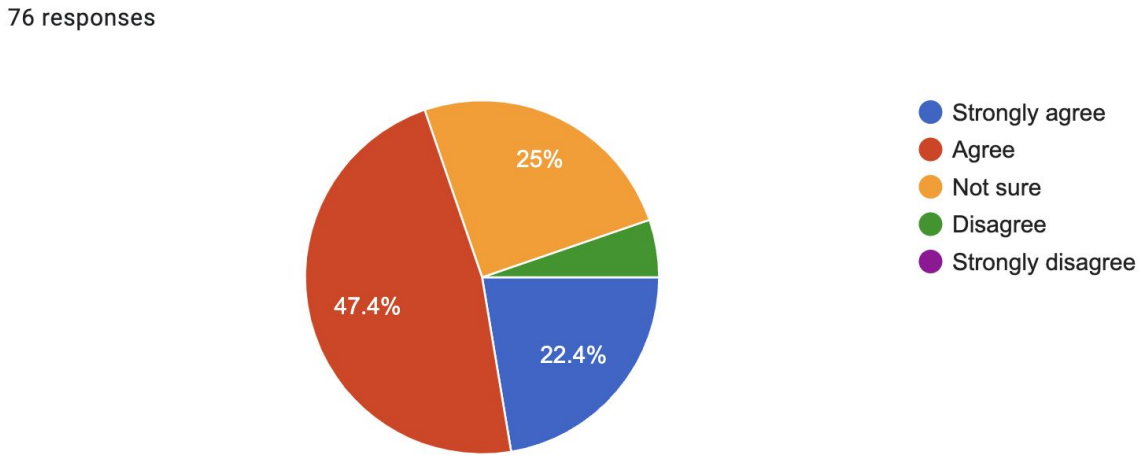
Is the UK investment in the detector R&D programme commensurate with its current research portfolio and future aspirations?

86 responses



Should the UK prioritise science areas in the national input to ESPPU?

+ More impact
+ Captures UK strengths
+/- Balanced programme
+/- Consider alternatives

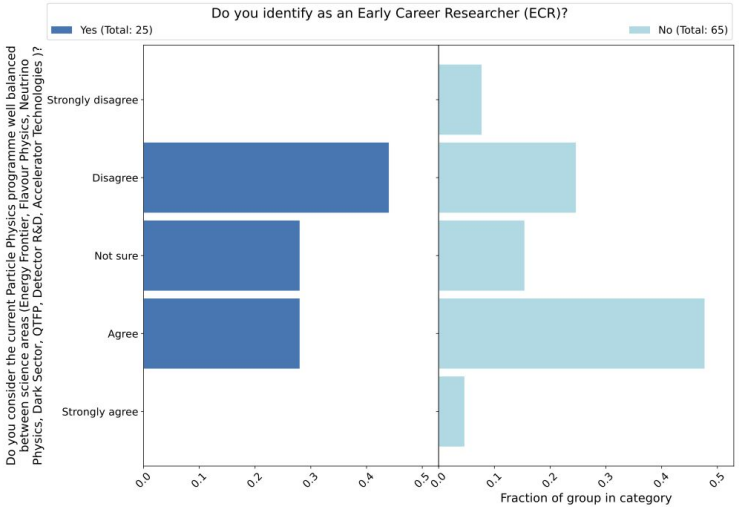


Next steps for PPAN roadmap

Inputs to PPAN for the roadmapping:

1. The RAW data from the survey.
2. Answers to the PPAN questions (see previously) that will be circulated to the community ahead of time. This will incorporate:
   a. The **survey analysis** performed by PPAP.
   b. Notes from **discussions** at this meeting.
   c. **Further quantitative analysis** of the survey results to explore trends between categories of respondent/correlations between questions (see right). Please let us know if you have suggestions/thoughts.
   d. **(Anonymous) comments** submitted following this meeting…

Thanks to Holly Pacey for sharing code for survey analysis!



As noted- the community will be able to comment on (2) before they are submitted.

Click here to see full survey summary document

Click here to leave meeting/post-meeting comments