

# 2024 Experimental CG Process

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IoP town meeting, 9<sup>th</sup> April 2026

# Introduction

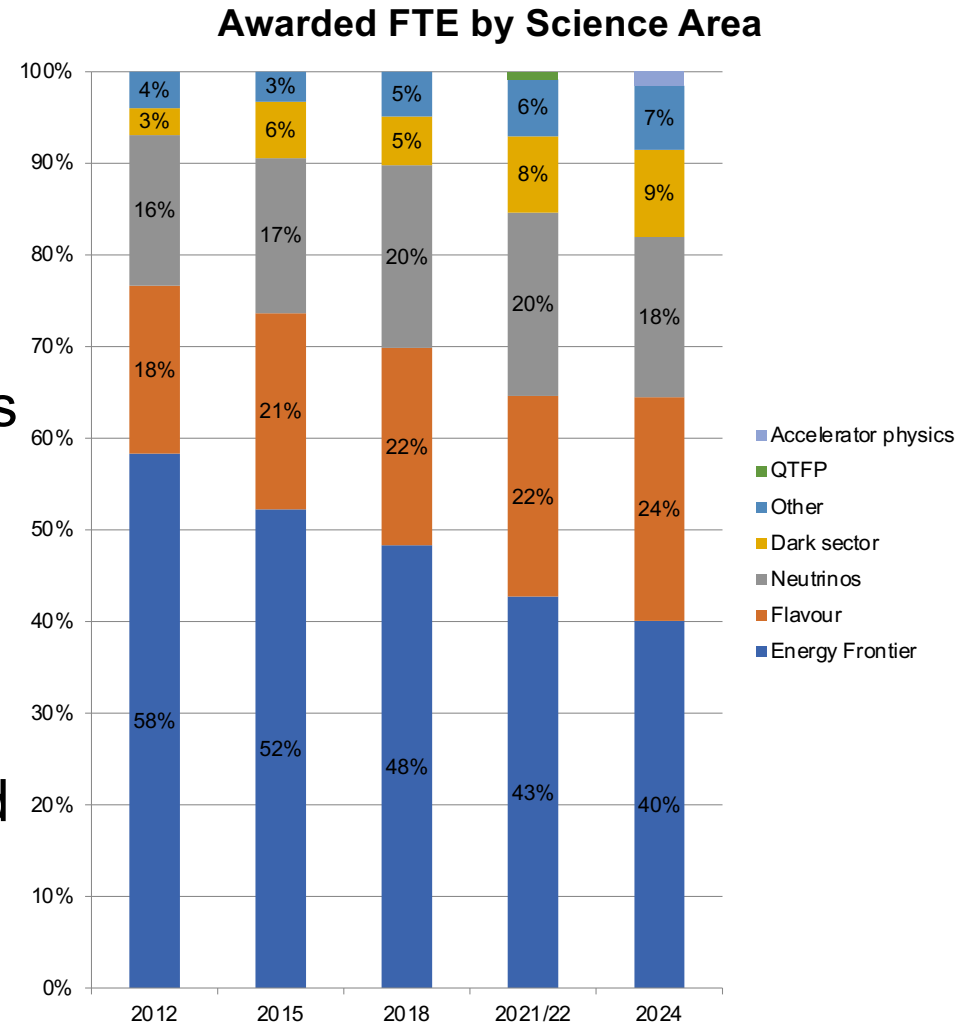
- Will outline process used by the panel for 2024 CG
- Panel members: J.Cole (Brunel); C.de Rham<sup>(\*)</sup> (Imp); E.Goudzovski (B'ham); C.Gwilliam (Liv); A.Kaboth (RHUL); P.Litchfield (Glasgow); D.Maitre<sup>(\*)</sup> (IPPP); K.Pallindino (Oxf); MP(Imp); D. Price (Manc); E. Rizvi (QMUL)  
<sup>(\*)</sup> members of theory CG panel
- Timeline
  - Panel scored between end-Feb submission and May
  - Clarification meetings
  - Meetings to discuss 1<sup>st</sup> round of scoring – May
  - 3-day main meeting – June
  - Finalisation meeting – Sept
- Budgetary crisis hit *after* we finalised our recommendations

# Particle physics experiment 2024 CG

- A reminder of what was funded:
  - Two years award from Oct 2025 to Sep 2027
  - Non-core effort was awarded for 18 months, core awarded for two years
  - Academic time remained at 4%
  - Travel and consumables were maintained at the current level
  - M&O awards were for two years
  - No equipment was awarded
  - No provision was made for new applicants / conferences / short courses
  - Spokesperson support considered on a case-by-case basis
- Priority give to funding researchers & meeting our int'al commitments
- Next review will take place in 2026 (grant period Oct 27-Sep 29)
- Beyond 2029, the intention is to award the CG on a 4-yearly cycle

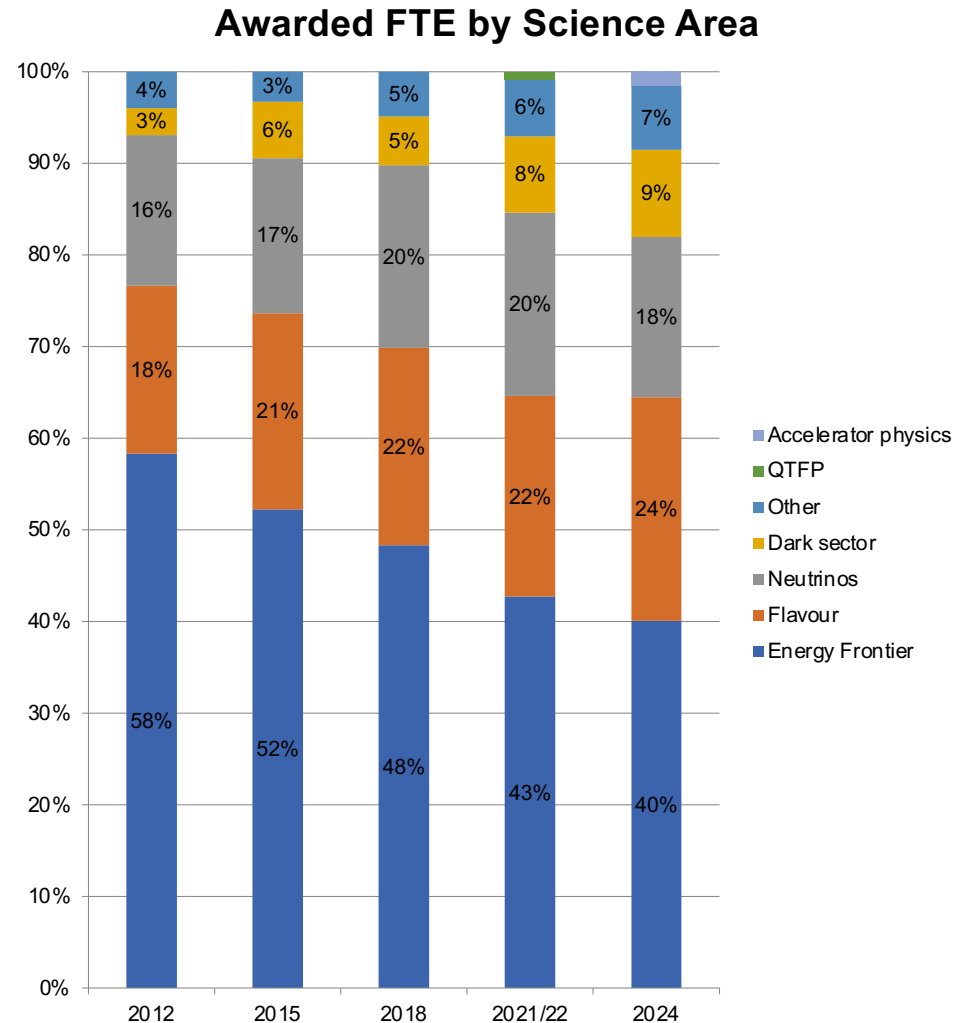
# PPE CG overview

- The UK 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



# PPE CG overview

- Energy-frontier physics remains a high priority with the upgrades coming to completion
- 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



# Handling of panel conflicts

- Panel members were considered conflicted for their own institute and experiment(s) – were asked to declare any further conflicts in advance
- Panel members did not score anything for which they were conflicted
- **All panel members were required to physically leave the room for any discussion for which they were conflicted**

# Panel evaluation

- Principles as in previous CG rounds
  - Panel were asked to look at scientific excellence and be cognisant of the SB PPAN roadmaps & our international commitments
- Programme divided into science themes
  - E.g. {University X, Energy Frontier}  
    {University Y, Neutrinos} etc.
  - 116 such themes in total [18 institutes, each with between 1-8 themes]
- Panel were asked to evaluate both each individual theme and each individual post

# Scoring scientific themes

- All non-conflicted panel members assigned the percentage of research within each science theme to quartiles
  - E.g. percentage of {University X, Energy Frontier} in uppermost quartile (=internationally excellent research), 3<sup>rd</sup> quartile, 2<sup>nd</sup>...
- With an identical algorithm to 2021 CG, weighted average used to form a **scientific-quality** score
  - Absolute scale and national-tensioning: panel had the placement for each theme across the entire programme
  - Natural variation in panel scoring considered at allocation

# Scoring posts

- All non-conflicted panel members also scored each individual post
  - Absolute scale and national-tensioning: panel had the placement for each post across the entire programme
  - Core and responsive handled separately
    - Did not have to compare e.g. analysis PDRA to a mechanical technician
  - Each (non-conflicted) panel member asked to score posts on scale 1-10
    - Each panel member asked to produce [separately for core/resp] Gaussian distribution with mean 6 and width 1
    - No significant scaling of panel distributions was required
    - Width of score distribution i.e. extent to which panel members agreed on the score for a given post, again considered at allocation

# Scoring posts

- Explicitly checked the extent to which the panel's scores for each individual post agreed
- Vast majority of scores were consistent
- All posts where the distribution of scores from different panel members had a large sigma were flagged
  - Discussed each one of these posts at a set of dedicated pre-meetings (May)
  - The panel were subsequently given the chance to update their scores and any residual differences were highlighted

# Turning scores into a preliminary allocation

- Agreed to set aside ~10% of our budget of posts (18 FTE) to address balance of programme/issues arising through allocation
  - e.g. science-theme X is under/overweight given quality/commitments
- Checked science-theme scores and post scores were well-correlated for the vast majority of cases before making any assignment – majority of the assignment then self-evident
- Allocated the posts we believed to be required to achieve the scientific aims in the highest-ranked themes; then moved to progressively lower-ranked themes
- Focused discussion on cases close the boundary

# Balance of programme

- Dedicated a significant fraction of our time to considering balance/fairness
- Identically to 2021 CG round, used metric  
**Scientific power** = **scientific quality** × **academic FTE in theme**
- **FTE allocated** vs **scientific power** was examined at level of each theme and at level of the institutes
  - Exceptions and the reasons for them discussed in detail, at a point where we had time/posts in-hand to modify the allocations



# Conclusions

- 2024 CG process evaluated both science themes and posts
  - Absolute scale and national-tensioning for both themes and posts
  - Majority of allocation self-evident – awarded posts required to deliver the science in highest-ranked themes
    - Checked/discussed posts where panel agreed poorly in advance
    - Discussion focused on boundary cases
  - Significant time and effort devoted to checking balance of programme/ fairness at both theme and institute level
  - Considered all other aspects of panel business (M&O, equipment, per-capita allowances)