

**STFC Town Meeting
@ IOP 2024 Joint APP, HEPP and NP Conference
10 April 2024**

NP Advisory Panel Update Report

Jacek Dobaczewski

NPAP

Outline of presentation

- Nuclear Physics community & NPAP membership
- NPAP Recent Activities
- STFC 2024 Nuclear Physics Roadmap
- NP and PPAN 10-year planning

UK nuclear-physics community (NPAP)

- **Science Areas are:**

- Nuclear Structure and Nuclear Astrophysics
- Hadron Physics
- Nuclear Theory

- **Members of NPAP**

- Jacek Dobaczewski (chair) University of York
- Gavin Lotay University of Surrey
- Rachel Montgomery University of Glasgow
- Philippos Papadakis STFC
- David Sharp University of Manchester
- Paul Stevenson University of Surrey

Recent Activities

- a. NPAP Chair's report to the STFC Science Board 6 July 2023

https://docs.google.com/presentation/d/1jeMUxN2IJFTX1_VP2Y-WL9esgrs4u0mr/edit?usp=sharing&oid=118072797665304986206&rtpof=true&sd=true

- b. Responding to the STFC request regarding the level of academic FEC awarded on the consolidated grant. On 2 May 2023, we asked the UK NP academics to express their opinion by filling in the form at

https://docs.google.com/forms/d/e/1FAIpQLSdn-xhDNJoGZGjLx15BonNfcUIaivIWpnpjN1pmBlHdMDFkbw/viewform?usp=pp_url

On 11 May, the responses collected were sent to STFC, see

<https://drive.google.com/file/d/1xgvqpDoSYjoY6sUDUNQbdZQ8Jot5x4yl/view?usp=sharing>

Recent Activities

- c. On 7 June 2023, we sent the NP community a request for anyone looking to submit a proposal to the Wave 4 Preliminary Activities; we received no responses.
- d. Engaging with the community regarding the GANIL-UK science opportunities that emerge after the recent STFC visit to GANIL. **(Wilton Catford)**
- e. Engaging with the newly created STFC Exascale Working Group and their Consultation Meeting - 8th & 9th August, College Court, Leicester. **(Matteo Vorabbi)**
- f. Engaging with the EPSRC Nuclear Academics Meeting 2023, Coventry University Campus, London, September 6-7th, 2023 **(Paddy Regan)**

2024 Nuclear Physics Roadmap

A. The Roadmap guidance with questions received on 3 February 2023 from the STFC recommends that the roadmap should include the following sections:

- Achievements/scientific discoveries since the last roadmap
- Key science questions which are priorities to address
- International context, international roadmaps, and strategies or strategic reviews
- Overview of the science areas including highlighting any complementary science/research fields or areas of overlap with programme areas
- Capabilities/ Facilities used to answer the science questions or per science area, including access arrangements
- UK leadership, involvement, current projects (STFC supported and non-supported) and future opportunities in each science area
- Current and future (short and long-term) infrastructure requirements and opportunities, with an idea of any specific drivers for these requirements (leadership, time, scale of investment etc)
- Underpinning technologies, capabilities and other cross cutting areas (including e-infrastructure/digital infrastructure)
- Science impact and community standing/performance
- Applications, innovation or industrial engagement

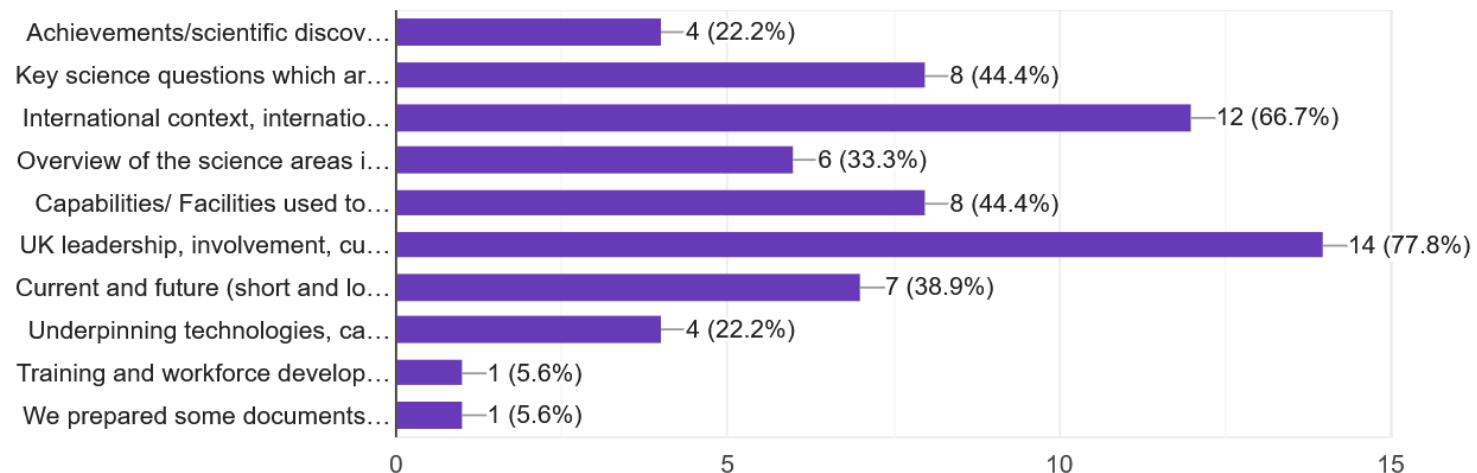
2024 Nuclear Physics Roadmap

B. The NPAP's strategy to build the 2024 Nuclear Physics Roadmap is based on the **bottom-up approach**. On 3 June and 31 July 2023, we sent the NP community (the ukusers mailing list) requests to send us information on eventual submission to the Roadmap by filling out the form at: https://docs.google.com/forms/d/1uFM4bbN0uYYL4JH5a_sy5tWcJDiNHTqggLZbg-7_KgU/edit.

I would like to provide input in the following areas:



18 responses



2024 Nuclear Physics Roadmap

- C. Early September 2023, the NPAP's members sent personalized emails to prospective contributors asking them to elaborate, at this stage, with a few sentences of **specific input** that they would like to contribute, covering the different areas they selected. Reminders were sent in late September 2023.
- D. In the middle of November 2023, the NPAP defined the **writing groups** and sent personalized emails to prospective contributors asking them to send concise paragraphs of text (without references) that would cover their contributions to the corresponding sections of the Roadmap.
- E. In January-March 2024, we received contributions to the **first draft of the Roadmap**. The NPAP now edit and complete the document; the **second draft of the Roadmap** will be distributed to the community by 1 May, ahead of the Nuclear Physics Forum in Liverpool scheduled for 8 May.

2024 Nuclear Physics Roadmap

- F. On 20 March, the STFC organised the Open Meeting for the NP Community requesting input to the roadmap that would allow for 10-year planning and feed into the PPAN roadmap.
- G. On 21 March, the NPAP sent a request asking the community to provide one-page inputs to the Roadmap's 10-year plan (deadline 1 May) covering:
 - a) **Physics case and goals.**
 - b) **Sketch of the budget line.**
 - c) **Draft of the timeline.**
 - d) **Key decision points, if known.**
 - e) **Any other info you deem useful.**
- H. Writing and editing of the 2024 NP Roadmap will continue as an **open process** whereby any member of the community can contribute to the existing writing group and/or propose new entries to the Roadmap.

Thank you

Nuclear Physics Roadmap 2023

- The PPAN advisory panels develop roadmaps, which provide the current and future science and facility requirements for a community along with recommendations for UK science return.
- It is recommended that the roadmap should include:
 - Achievements/scientific discoveries since the last roadmap
 - Key science questions which are priorities to address
 - International context, international roadmaps, and strategies or strategic reviews
 - Overview of the science areas
 - Capabilities/ Facilities used to answer the science questions or per science area
 - UK leadership, involvement, current projects
 - Current and future infrastructure requirements and opportunities
 - Underpinning technologies, capabilities and other cross cutting areas
 - Science impact and community standing/performance
 - Applications, innovation or industrial engagement
- NUPECC Long Range Plan 2023 (UK working-group members?)
- Call for contributions: **Action: April 2023**
- Dedicated (mini)workshop during the NP Forum in May?

Review Panel Meeting on the EIC project

- Mission charge: to provide assurance of the UKRI criterion “Evidence of user or community requirement”.
- Numerous comments from the NP community.
- Consultations with the PPAP & PAAP chairs
- Peter and Daria’s [presentation](#) at the NP Community meeting
 - The EIC project is built and supported across boundaries between the nuclear and particle physics.
 - Overwhelmingly strong support from vibrant community with recognized international leadership and expertise.
 - Positive interest and support from parts of the community beyond the immediate user groups.

News

- NPAP Community Consultation regarding the level of academic FEC awarded on the consolidated grant: **Action: April 2023**
 - Some academic FEC awarded on a grant, or
 - 0% academic FEC and prioritise funding towards having more PDRAs/supporting a broader programme, or
 -
- APS open access program for UK institutions
 - Since March 1st APS has had an [interim open access program](#) for UK institutions that runs until June 30th 2023, a CC-BY license at no cost
- [Call for Applications](#) to STFC Advisory Bodies and Peer Review Panels, 2023.
Closing date for applications is **14 May 2023**.



Thank you