



UK Nuclear Activity

February 2023 Issue 115

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Newsletter archive: <http://npg.dl.ac.uk/OutreachNewsletter/index.html>

Nuclear Physics Public Engagement Website: [NuclearPhysicsForYou](#)

1. Nuclear Physics Publications for February*

Phys. Rev. C **107** L021301 (2023) (<https://doi.org/10.1103/PhysRevC.107.L021301>)

Spectroscopy along flerovium decay chains. II. Fine structure in odd-A ^{289}Fl

D. M. Cox *et al.*

Published 6 February 2023

Phys. Rev. C **107** 024301 (2023) (<https://doi.org/10.1103/PhysRevC.107.024301>)

Spectroscopy along flerovium decay chains. III. Details on experiment, analysis, ^{282}Cn , and spontaneous fission branches

A. Sămark-Roth *et al.*

Published 6 February 2023

Phys. Rev. C **107** 024311 (2023) (<https://doi.org/10.1103/PhysRevC.107.024311>)

Exploring the limits of existence of proton-rich nuclei in the $Z=70-82$ region

E. M. Lykiardopoulou *et al.*

Published 21 February 2023

Int. J. Unconventional Computing **18** 83 (2023)

(<https://www.oldcitypublishing.com/journals/ijuc-home/ijuc-issue-contents/ijuc-volume-18-number-1-2023/ijuc-18-1-p-83-92/>)

Comments on Quantum Computing in Nuclear Physics

Paul D. Stevenson

Published 6th March 2023

Chapter in "Handbook of Nuclear Physics", (Springer Nature Singapore 2022) pp.1-49

(https://doi.org/10.1007/978-981-15-8818-1_43-1)

Beta Decay: Probe for Nuclear Structure and the Weak Interaction

B. Rubio, W. Gelletly and O. Naviliat-Cuncic

2. News to Report

a. STFC announcement - NP Prioritisation Panel

In October/November 2022 a strategic review was carried out for nuclear physics large project proposals. Funding was identified as being available in the nuclear physics programme from 2024 to support new nuclear physics large projects. The strategic prioritisation process was carried out to provide a recommendation of the proposals that would go forward to full peer review through the Project Peer Review Panel (PPRP).

An international panel was set up to carry out the strategic review of nuclear physics large project proposals. Five proposals were received and considered by the panel on 3 November 2022. Each proposal was discussed in detail against the STFC peer review criteria and scored. The panel developed a ranked list of the proposals and assigned each proposal an alpha and impact rating. From the five proposals, two were invited to submit full proposals to the PPRP. The projects invited to submit proposals were FAUST and RIBF.

The panel members were chosen from the range of nuclear physics science areas (Nuclear Structure, Nuclear Astrophysics, Hadronic Physics and Theory). Due to the small size of the nuclear physics community the panel was mainly international with representatives from both European and US communities. Names of the panel members are listed below for information:

| | |
|---------------------------|-----------|
| C. Touramanis (Chair) | Liverpool |
| A. Murphy (Science board) | Edinburgh |
| W. Korten | CEA |
| N. Orr | LPC Caen |
| H. Caines | Yale |
| Y. Litvinov | GSI |
| T. Peitzmann | Utrecht |
| A. Tumino | INFN |

3. Outreach Activity

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4. Media Interactions

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| | |
|----------------|------|
| J. Escher | LLNL |
| J. Dobascewski | York |

Should you have any questions relating to the NP Prioritisation, please do not hesitate to contact either Melanie.Kidd@stfc.ukri.org or Jenny.Hiscock@stfc.ukri.org.

Contribution from Melanie Kidd, STFC

b. STFC announcement - Funding available for short conferences/courses

Within STFC, the Nuclear Physics Research Grants support research in the areas of experimental and theoretical nuclear physics. Applications for work in these areas are assessed by the Nuclear Physics Grants Panel (NPGP).

STFC would like to remind the community that there is a small amount of funding available for colleagues to organise various conferences and workshops. Applications can be made at any time for contributions to the cost of organising conferences and workshops within the NPGP's area of interest. Applications should include the following information:

- The proposed programme and list of speakers
- The likely benefits to the UK Nuclear Physics community of holding the conference or workshop
- A budget setting out both costs and income, based on estimated attendance and contributions from other sources (both guaranteed and requested)

Should you have any queries relating to this funding and to request the application documentation, please contact Lindsay.Clark@stfc.ukri.org.

Contribution from Melanie Kidd, STFC