



UK Nuclear Activity

May 2026 Issue 154

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

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

IoP Support and grants: <https://www.iop.org/about/support-grants>

1. Nuclear Physics Publications for May*

If you are publishing a paper that you think would be of media value, please contact [Wendy Ellison](#), STFC Press Officer. She can help with press releases and publicity. If you get in touch with her before publication, she can also get material ready in advance for the day of publication.

Phys. Rev. Lett. **136** 172501 (2026) (<https://doi.org/10.1103/vp3m-5rpp>)

Dipole Strength Distribution of ^8He and Decay Characteristics

C. Lehr *et al.*

Published 1 May 2026

Phys. Lett. B **878** 140506 (2026) (<https://doi.org/10.1016/j.physletb.2026.140506>)

First experimental isotopic mapping of the fission “ γ -bump” and its connection to the Pygmy dipole resonance

N. Kumar *et al.*

Published 8 May 2026

Phys. Lett. B **878** 140558 (2026) (<https://doi.org/10.1016/j.physletb.2026.140558>)

Regularity of core coupled high-spin structure in neutron-rich $^{196-202}\text{Au}$ isotopes approaching $N=126$

Y. Cho *et al.*

Published 17 May 2026

Phys. Lett. B **878** 140564 (2026) (<https://doi.org/10.1016/j.physletb.2026.140564>)
Isospin symmetry holds beyond the proton drip line: First observation of excited states in ^{55}Cu
S. Pigliapoco *et al.*
Published 20 May 2026

Phys. Rev. C **113** 054612 (2026) (<https://doi.org/10.1103/hyxd-f6sd>)
Investigation of dynamical effects in symmetric and asymmetric fusion channels using fusion cross sections as a probe
M.Kaur *et al.*
Published 26 May 2026

Phys. Rev. C **113** 055809 (2026) (<https://doi.org/10.1103/9mnb-t3yz>)
Universal relation between dipole polarizability of finite nuclei and neutron-star compactness
P. S. Koliogiannis, T. Ghosh, E. Yüksel and N. Paar
Published 26 May 2026

Progress of Theoretical and Experimental Physics (2026) (<https://doi.org/10.1093/ptep/ptag096>)
Determination of S_{18} from ^9C breakup reaction within a four-body reaction model
S. Ogawa, T. Fukui, Jagjit Singh, and K. Ogata
Published 25 May 2026

*Also includes missed publications from previous months

2. News to Report

a. UK Nuclear Data 2026 Conference - Registration and abstract submissions open

Registration and abstract submissions are now open for the conference UK Nuclear Data 2026 - A Renaissance. The conference will be held from the 8th-10th of September at the Institute of Physics building in London. It is intended to act as a catalyst for future collaborations on the topic of nuclear data between the UK's fundamental and applied nuclear physics communities.

Registration, abstract submission, and other information on the event can be found here:
<https://iop.eventsair.com/uknd26/>

Contribution from Jack Henderson, University of Surrey

b. Training and scientific workshops organised in South Africa

In May, a series of workshops, aiming to develop skills and foster international collaboration in nuclear science and technology, was organised in South Africa. The programme began with two specialist training workshops delivered through the South African Institute for Nuclear Technology & Sciences

(SAINTS), including lectures by Marc Labiche, Paul Morrall and Philippos Papadakis from STFC Daresbury Laboratory.

The first, Spectrum, Presentation, Analysis and Manipulation, combined introductory lectures on environmental measurements and accelerator mass spectrometry, with practical training in data analysis tools. The workshop attracted seven participants from South Africa, Kenya and Tanzania.



The second workshop focused on thin-film target production for nuclear physics experiments. Six participants from South Africa gained hands-on experience in the preparation and characterisation of targets, gaining

valuable practical skills to support future research activities.



The training events were followed by the 6th Advanced Nuclear Science and Technology Techniques (ANSTT6) workshop, a week-long meeting covering topics ranging from environmental and safety applications to fundamental nuclear structure research. Alongside scientific presentations, attendees took part in practical training sessions held in the afternoon, facilitated by the keynote speakers. The event, co-chaired by Alison Bruce from the University of Brighton and Pete Jones from iThemba LABS, attracted over 60 in-person participants and a further 30 online attendees, from a total of 12 countries.

These activities were supported through the DASSIE and Target Making grants awarded by the Science and Technology Facilities Council through their International Science Partnerships Fund's Research Infrastructure Partnership Programme, the South African National Research Foundation and other partners.



Contribution from Philippos Papadakis (Daresbury Laboratory), Alison Bruce (University of Brighton) and Marc Labiche (Daresbury Laboratory)

c. Exotic Hadron Spectroscopy 2026 Workshop Held at Cambridge University

The Exotic Hadron Spectroscopy 2026 Workshop was held at the Department of Applied Mathematics and Theoretical Physics (DAMTP) at Cambridge University (30 March to 1 April).

This was the sixth in a series of workshops which bring together the nuclear and particle physics communities to discuss the latest developments (experimental and theoretical) in exotic and conventional hadron spectroscopy, with a particular focus on analysis methods and search strategies for current and future experimental facilities. With 25 speakers from the UK and abroad, ranging from early-career researchers to established leaders in the field, topics included updates and new results from all major experiments, progress in lattice quantum chromodynamics, and developments in phenomenological models and other theoretical approaches. Participants also enjoyed a workshop dinner at Christ's College and a public lecture, as part of the Cambridge Festival, from Prof. Frank Close: "Destroyer of Worlds: the prequel and sequel to Oppenheimer".



The workshop was attended by 51 registered participants from 13 different countries, including Belgium, China, France, Germany, Ireland, Italy, Poland, Slovenia, South Korea, Spain, Switzerland, the United Kingdom, and the United States. The gender distribution of the workshop participants was 40 male and 11 female. There were in total 25 talks delivered over three days, including 16 invited and 9 contributed talks. Among the participants were several early career-researchers, some of whom delivered talks. The public talk by Prof Frank Close was attended by around 100 participants.

The workshop was sponsored by the IoP HEPP Group, IoP NP Group, UKRI-STFC, IPPP Durham University and Virtual Centre for UK Lattice Field Theory (UKLFT)

Contribution from Naeem Anwar (University of Swansea) on behalf of the organisers

3. Outreach Activity

4. Media Interactions

