UK Nuclear Activity

January 2016 Issue 31

In this issue,

1. Nuclear Physics Publications for January

2. News to Report
   a. UK-theory initiative
   b. Applications of Novel Scintillators in Research and Industry Workshop
   c. UK Nuclear Data Network
   d. ALICE completes higher energy LHC Pb-Pb run and produces first physics result

3. Outreach Activity

4. Media Interactions

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

Nuclear Physics Public Engagement Website: www.stfc.ac.uk/NuclearPhysicsForYou

Nuclear Physics Outreach Poster – order hardcopies from STFC free of charge here

---

1. Nuclear Physics Publications for January*

If you are publishing a paper that you think would be of media value please let Wendy Ellison wendy.ellison@stfc.ac.uk , STFC Press Officer, know. 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.

Bulg. J. Phys. vol.42 no.4, 593 (2015) http://www.bjp-bg.com/paper1.php?id=796
Construction of the UK DESPEC Array for Fast-Timing Measurements
S. Lalkovski[1], A.M. Bruce[2], I. Burrows[3], D.M. Cullen[4], A. Grant[3], I.H. Lazarus[3], Zs. Podolyák[1], V.F.E. Pucknell[3], P.H. Regan[1], M. Rudigier[1], J. Simpson[3], J.F. Smith[5]
*Published December 2015

J. Phys. G: Nucl. Part. Phys. 43, 015103 (2015) http://iopscience.iop.org/article/10.1088/0954-3899/43/1/015103 Low-lying states near the $I^{\pi}=6^{+}$ isomer in ^{108}Ag
J Sethi[1], R Palit[1], J J Carroll[2], S Karamian[3,12], S Saha[1], S Biswas[1], Z Naik[4], T Trivedi[1], M S Litz[2],P Datta[5], S Chattopadhyay[6], R Donthi[1], U Garg[7], S Jadhav[1], H C Jain[1], S Kumar[8], D Mehta[9],B S Naidu[1], G H Bhat[10], J A Sheikh[10], S Sihotra[9] and P M Walker[11]
*Published 8 December 2015

Phys. Scr. 91, 013010 (2015) http://iopscience.iop.org/article/10.1088/0031-8949/91/1/013010
High-K isomerism in rotational nuclei
P M Walker[1,3] and F R Xu[2]
*Published 18 December 2015

Phys. Lett. B 752 (2016) 267–277 http://www.sciencedirect.com/science/article/pii/S0370269315009041
Search for weakly decaying $\bar{\Lambda}\bar{n}$ and $\Lambda\Lambda$ exotic bound states in central Pb—Pb collisions at $\sqrt{s_{NN}}$ = 2.76 TeV
ALICE Collaboration, UK Authors: D. Alexandre, L.S. Barnby, M. Borri, M. Chartier, D. Evans, M.A.S. Figueredo, L.D.

*Also including missed publications from previous months.

Hanratty, P.G. Jones, A. Jusko, M. Krivda, G.R. Lee, R.C. Lemmon, R. Lietava, J. Norman, R. Romita, O. Villalobos Baillie
Published 10 January

Phys. Lett. B 752, (2016) http://www.sciencedirect.com/science/article/pii/S0370269315008503
The pygmy quadrupole resonance and neutron-skin modes in ^{124}Sn
M. Spieker[a,*], N. Tsoneva[b,c,d], V. Derya[a], J. Endres[a], D. Savran[e,b], M.N. Harakeh[f], S. Harissopulos[g], R.-D. Herzberg[h], A. Lagoyannis[g], H. Lenske[c], N. Pietralla[i], L. Popescu[f,j], M. Scheck[k,i], F. Schlüter[a], K. Sonnabend[l], V.I. Stoica[f,1], H.J. Wörtche[f,1], A. Zilges[a]
Published 10 January

J. Phys. G: Nucl. Part. Phys. 43, 024012 (2016) http://iopscience.iop.org/article/10.1088/0954-3899/43/2/024012 Unique and complementary information on shape coexistence in the neutron-deficient Pb region derived from Coulomb excitation
K Wrzosek-Lipska1,2 and L P Gaffney1,3
Published 14 January 2016

Phys. Rev. C 93, 014309 (2016) http://journals.aps.org/prc/abstract/10.1103/PhysRevC.93.014309
E3 and M2 transition strengths in $^{209}_{83}$Bi
O. J. Roberts[1,2,*], C. R. Niţă[1,3], A. M. Bruce[1], N. Mărginean[3], D. Bucurescu[3], D. Deleanu[3], D. Filipescu[3], N. M. Florea[3,4], I. Gheorghe[3,5], D. Ghiţă[3], T. Glodariu[3], R. Lica[3], R. Mărginean[3], C. Mihai[3], A. Negret[3], T. Sava[3], L. Stroe[3], R. Şuvăilă[3], S. Toma[3], T. Alharbi[6,7], T. Alexander[6], S. Aydin[8],B. A. Brown[9], F. Browne[1], R. J. Carroll[6], K. Mulholland[10], Zs. Podolyák[6], P. H. Regan[6,11], J. F. Smith[10], M. Smolen[10], and C. M. Townsley[6]
Published 14 January 2016

Eur. Phys. J. A 52, 6 (2016) http://link.springer.com/article/10.1140/epja/i2016-16006-5
Angle-integrated measurements of the ^{26}Al (d, n)^{27}Si reaction cross section: a probe of spectroscopic factors and astrophysical resonance strengths
A. Kankainen [(1)], P. J. Woods [(1)], F. Nunes [(2) (3) (4)], C. Langer [(2) (4)], H. Schatz [(2) (3) (4)], V. Bader [(2) (3)], T. Baugher [(2)], D. Bazin [(2)], B. A. Brown [(2) (3) (4)], J. Browne [(2) (3) (4)], D. T. Doherty [(1)], A. Estrade [(1)], A. Gade [(2) (3)], A. Kontos [(2)], G. Lotay [(1)], Z. Meisel [(2) (3) (4)], F. Montes [(2) (4)], S. Noji [(2)], G. Perdikakis [(4) (5)], J. Pereira [(2) (4)], F. Recchia [(2)], T. Redpath [(5)], R. Stroberg [(2) (3)], M. Scott [(2) (3)], D. Seweryniak [(6)], J. Stevens [(2) (4)], D. Weisshaar [(2)], K. Wimmer [(5)], R. Zegers [(2) (3) (4)]
Published 14 January 2016

Phys. Rev. Lett. 116, 022701 (2016) http://journals.aps.org/prl/abstract/10.1103/PhysRevLett.116.022701
Spectroscopic Quadrupole Moments in ^{96,98}Sr: Evidence for Shape Coexistence in Neutron-Rich Strontium Isotopes at N=60
E. Clément[1,2,*], M. Zielińska[3,4], A. Görgen[5], W. Korten[3], S. Péru[6], J. Libert[6], H. Goutte[3], S. Hilaire[6], B. Bastin[1], C. Bauer[7], A. Blazhev[8], N. Bree[9], B. Bruyneel[8], P. A. Butler[10], J. Butterworth[11], P. Delahaye[1,2], A. Dijon[1], D. T. Doherty[3], A. Ekström[12], C. Fitzpatrick[13], C. Fransen[8], G. Georgiev[14], R. Gernhäuser[15], H. Hess[8], J. Iwanicki[4], D. G. Jenkins[11], A. C. Larsen[5], J. Ljungvall[14], R. Lutter[15], P. Marley[11], K. Moschner[8], P. J. Napiorkowski[4], J. Pakarinen[2], A. Petts[10], P. Reiter[8], T. Renstrøm[5], M. Seidlitz[8], B. Siebeck[8], S. Siem[5], C. Sotty[14], J. Srebrny[4], I. Stefanescu[9], G. M. Tveten[2,5], J. Van de Walle[2], M. Vermeulen[11], D. Voulot[2], N. Warr[8], F. Wenander[2], A. Wiens[8], H. De Witte[9], and K. Wrzosek-Lipska[4]
Published 15 January 2016

EPJ Web of Conferences 107, 08001 (2016) http://dx.doi.org/10.1051/epjconf/201610708001
Resonances and reactions from mean-field dynamics
P. D. Stevenson[a]
Published 19 January 2016

JCAP01 (2016) 032 http://iopscience.iop.org/article/10.1088/1475-7516/2016/01/032
Study of cosmic ray events with high muon multiplicity using the ALICE detector at the CERN Large Hadron Collider
ALICE Collaboration, UK Authors: D. Alexandre, L.S. Barnby, M. Borri, M. Chartier, D. Evans, M.A.S. Figueredo, K.L. Graham, P.G. Jones, A. Jusko, M. Krivda, G.R. Lee, R.C. Lemmon, R. Lietava, J. Norman, R. Romita, O. Villalobos Baillie, N. Zardoshti
Published 19 January

Phys. Rev. C 93, 014613 (2016) http://journals.aps.org/prc/abstract/10.1103/PhysRevC.93.014613
One-neutron removal from Ne29: Defining the lower limits of the island of inversion

N. Kobayashi[1,*], T. Nakamura[1], Y. Kondo[1], J. A. Tostevin[1,2], N. Aoi[3,†], H. Baba[3], R. Barthelemy[4], M. A. Famiano[4], N. Fukuda[3], N. Inabe[3], M. Ishihara[3], R. Kanungo[5], S. Kim[6], T. Kubo[3], G. S. Lee[1], H. S. Lee[6], M. Matsushita[3,‡], T. Motobayashi[3], T. Ohnishi[3], N. A. Orr[7], H. Otsu[3], T. Sako[1], H. Sakurai[3], Y. Satou[6], T. Sumikama[8,§], H. Takeda[3], S. Takeuchi[3], R. Tanaka[1], Y. Togano[3,‖], and K. Yoneda[3]
Published 20 January 2016

NIMA, 807, 69 (2016) http://www.sciencedirect.com/science/article/pii/S0168900215013169
Characterization of a neutron–beta counting system with beta-delayed neutron emitters
J. Agramunt[a], J.L. Tain[a,*], M.B. Gómez-Hornillos[b], A.R. Garcia[c], F. Albiol[a], A. Algora[a,g], R. Caballero-Folch[b], F. Calviño[b], D. Cano-Ott[c], G. Cortés[b], C. Domingo-Pardo[a], T. Eronen[d], W. Gelletly[e], D. Gorelov[d], V. Gorlychev[b], H. Hakala[d], A. Jokinen[d], M.D. Jordan[a], A. Kankainen[d], V. Kolhinen[d], L. Kucuk[f],T. Martinez[c], P.J.R. Mason[e], I. Moore[d], H. Penttilä[d], Zs. Podolyák[e], C. Pretel[b], M. Reponen[d], A. Riego[b],J. Rissanen[d], B. Rubio[a], A. Saastamoinen[d], A. Tarifeño-Saldivia[a,b], E. Valencia[a]
Published 21 January 2016

Phys. Rev. C 93, 014313 (2016) http://journals.aps.org/prc/abstract/10.1103/PhysRevC.93.014313
In-beam γ-ray spectroscopy of ^{63}Mn
T. Baugher[1,2,3], A. Gade[1,2], R. V. F. Janssens[4], S. M. Lenzi[5], D. Bazin[1], M. P. Carpenter[4], C. J. Chiara[4,6], A. N. Deacon[7], S. J. Freeman[7], G. F. Grinyer[8], C. R. Hoffman[4], B. P. Kay[4], F. G. Kondev[9],T. Lauritsen[4], E. M. Lunderberg[1,2], S. McDaniel[1,2], K. C. Meierbachtol[1,10], A. Ratkiewicz[1,2], S. R. Stroberg[1,2], K. A. Walsh[1,2], D. Weisshaar[1], and S. Zhu[4]
Published 21 January 2016

Phys. Rev. Lett. 116, 032501 (2016) http://journals.aps.org/prl/abstract/10.1103/PhysRevLett.116.032501
Simple Nuclear Structure in $^{111-129}$Cd from Atomic Isomer Shifts
D. T. Yordanov[1,2,3,*], D. L. Balabanski[4], M. L. Bissell[5], K. Blaum[2], I. Budinčević[5], B. Cheal[6], K. Flanagan[7], N. Frömmgen[8], G. Georgiev[9], Ch. Geppert[8,10], M. Hammen[8], M. Kowalska[3], K. Kreim[2],A. Krieger[8], J. Meng[11], R. Neugart[2,8], G. Neyens[5], W. Nörtershäuser[8,12], M. M. Rajabali[5], J. Papuga[5],S. Schmidt[10], and P. W. Zhao[13]
Published 22 January 2016

Phys. Rev. C 93, 014319 (2016) http://journals.aps.org/prc/abstract/10.1103/PhysRevC.93.014319
Combined high-resolution laser spectroscopy and nuclear decay spectroscopy for the study of the low-lying states in Fr206, At202, and Bi198
K. M. Lynch[1,2,*], T. E. Cocolios[2,3], J. Billowes[3], M. L. Bissell[2,3], I. Budinčević[2], T. Day Goodacre[3,4], R. P. de Groote[2], G. J. Farooq-Smith[2,3], V. N. Fedosseev[4], K. T. Flanagan[3], S. Franchoo[5], R. F. Garcia Ruiz[2], H. Heylen[2], R. Li[5], B. A. Marsh[4], G. Neyens[2], R. E. Rossel[4,6], S. Rothe[4], H. H. Stroke[7], K. D. A. Wendt[6], S. G. Wilkins[3], and X. Yang[2]
Published 27 January 2016

---

2. News to Report

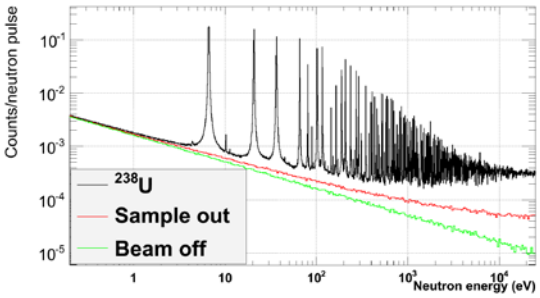
a. UK-theory initiative. We are pleased to announce that the STFC has just funded a UK-theory initiative for training in nuclear physics, collaborations, and networking activity.
The funds come as part of the STFC award "Nuclear Theory Chair" that was granted in 2014 to the University of York to provide support for nuclear theory in the UK. Jacek Dobaczewski was appointed as the new Chair in Theoretical Nuclear Physics on 1 June 2015. The University of York followed up by providing matching (FTE) funds for the new lectureship of Alessandro Pastore, who started on 1 September 2015, as well as a PHD student, and another studentship starting in 2016.
The currently projected expenses mean that the STFC award will have a surplus, to be used for the benefit of the whole UK nuclear theory community. After extensive consultations with the community, Jacek Dobaczewski presented a proposal for the use these funds to the STFC last October, which has now been accepted. The new UK-theory initiative will strengthen the efforts on the community taking three types of actions in the organization of TALENT courses, collaborative meetings, and a visitor programme. It is perceived that this will pose strong bases for increasing the international leadership of the UK in theory as well as for securing the workforce needed to support that.
Firstly, we proposed to organize in the UK in 2016-2018 three TALENT courses (Training in Advanced Low Energy Nuclear Theory, http://www.nucleartalent.org/). The first one, on density functional theory and self-consistent methods, will be organized in York between 17 July and 6 August 2016. The main lecturers will be Jacek Dobaczewski,

Alessandro Pastore, Andrea Idini, who is a new Newton postdoc starting in March 2016 in Surrey, and Nicolas Schunck from LLNL, USA.
Secondly, we will organize regular collaborative meetings of the UK nuclear-theory community. The first one has already taken place in Manchester on 4-5 November 2015. While the meetings will bring together all academics and students working in nuclear theory, they will be fully open to whole nuclear community. The focus will be on short selected presentations of the main research activities that are being pursued, and on discussions of possible common opportunities and plans for collaborations. We think that such collaborative meetings could bring us a substantial improvement in UK nuclear theory through mutual exchange of ideas and cross-fertilization, and development of cross-institutional collaborations.
Thirdly, we will establish an active and vibrant visitor programme, which is one of the cornerstones required for the successful expansion of UK research in nuclear theory. We envisage two types of visits: of high-profile prominent scientists, with whom we would be able to discuss strategic long-term plans and work towards extended collaborations, and of task-oriented collaborators who will use their visits for intense work on specific projects. We will advertise all the visits through newsletters and a dedicated web page, trying to make every visit an event that will be linked to high-visibility colloquia and seminars, and will involve short trips to different UK nuclear-theory centers.
It is generally accepted that the single most important issue for the UK nuclear theory community, which hampers development of a sustained activity commensurate with the ongoing UK efforts in experiment, is the small size of the UK workforce. This will be our future challenge. Thanks to the STFC support, the training of bright students and postdocs and the coming of high-caliber visitors will help to pose the basis for the rebirth of a strong nuclear theory programme in the UK.
A web page devoted to the new activity will shortly be set up and announced through a news release. All further communication will be channeled through the web page. An ad-hoc directorate composed of Carlo Barbieri C.Barbieri@surrey.ac.uk, Jacek Dobaczewski jacek.dobaczewski@york.ac.uk, and Niels Walet Niels.Walet@manchester.ac.uk will manage the activities related to the awarded proposal.
Contribution by Jacek Dobaczewski Jacek.Dobaczewski@fuw.edu.pl (York).

b. Applications of Novel Scintillators in Research and Industry Workshop. A workshop on the "Applications of Novel Scintillators in Research and Industry" will be held at University College Dublin between the 11th and 13th of May, 2016. This forthcoming three-day workshop will follow on from last year's highly successful event, aimed at bringing together scientists and engineers from different areas of research in physics and industry to consider the next generation of scintillators for a wide range of applications. In particular, the workshop will focus on the development of prospective organic, inorganic, ceramic, and glass-ceramic scintillators, and their compatibility to photo-sensors such as PMTs and SiPMs. The applications of such detectors in the aforementioned areas of research and industry offer a step-change in detector performance, which could have profound consequences in future research. The advent of these prospective materials for nuclear science are to be addressed, resulting in common points of contact between the different working groups.
Topics of the workshop include, but are not limited to:
• Novel Scintillators: Glass, Glass-Ceramic, Ceramic, Polymer, Inorganic/Organic
• Scintillator Characterisation
• Scintillator Growth and Production
• Scintillator Detectors and Photosensors
• Applications of Scintillators: Medical Imaging, Defence/Security, Astrophysics, Nuclear/Particle Physics, Other applications
We plan to have around 35 talks in addition to seven invited talks, and a poster session. We aim to publish proceedings after the workshop in the IoP Journal of Physics Conference Series. Prizes for the best talks and posters will be awarded by ORTEC.
Invited Speakers include:
Stefania Baccarro (ENEA)
Nerine Cherepy (LLNL)
Christophe Dujardin (Lyon)
Mark McConnell (UNH)
Patrick Regan (Surrey)
Dennis Schaart (Delft)
Paul Schotanus (Scionix)

The new website for the forthcoming ANSRI workshop can be found here. This page will be updated extensively before registration opens next week. The proceedings from the previous workshop can be found here.
Contribution by Oliver Roberts oliver.roberts@ucd.ie (University College Dublin).

c. UK Nuclear Data Network. Bill Gelletly has been writing in recent editions of this newsletter of the importance of "industrial" nuclear data to support reactor operations, future designs and advanced fuel performance. This has now been recognised by the award of a substantial STFC Network+ grant to establish the UK Nuclear Data Network (UKNDN). This will build a strong connection between academia, industrial partners, national labs, regulators and UK representatives on international nuclear data committees (IAEA, NEA). In particular, it will revitalise the role of UK Nuclear Science Forum (UKNSF) while the Government develops a permanent structure to manage the UK's approach to nuclear data. Furthermore, the UKNDN will ensure continued access to world leading nuclear data measurement facilities, such as the neutron time-of-flight facility, n_TOF, at CERN. The Network+ proposal received strong support from NIRAB (Nuclear Innovation and Research Advisory Board) and UKNSF and nuclear companies, particularly AMEC-Foster Wheeler, AWE and Rolls-Royce.
The Leadership Team is led by Dr Gavin Smith (PI) and includes the universities of Manchester, Surrey and York along with staff from NNL and NPL. The Network will facilitate the measurement, analysis and dissemination of industrial nuclear data. The network will provide support for small-scale and scoping projects as well as travel and opportunities for secondments for students and early-career researchers. A number of training courses and workshops will be organised by the UKNDN, details of which will be announced on the soon-to-be-operational website. Universities within the UK are encouraged to join the UKNDN and will be able to bid for funding in response to calls which shall be made twice per year. The UKNDN will start in April 2016 and run for four years, during which we expect to fund a number of projects and training courses, contributing significantly to the UK's Nuclear Data research capability. UK universities with activities in this area have already signed up to the Network. Let Gavin know (gavin.smith@manchester.ac.uk) if you would like to be added to the circulation list.



Data from a capture cross section measurement on 238U performed at the n_TOF facility.
Contribution by Tobias Wright tobias.wright@manchester.ac.uk (Manchester).

d. ALICE completes higher energy LHC Pb-Pb run and produces first physics result. The LHC heavy-ion run finished on 13 December and ALICE completed its goal of collecting around ten times more collisions than in the previous runs (2010-11). This run was the first with a new higher beam energy and the total energy in a Pb-Pb collision now exceeds 1 PeV: 5 TeV per nucleon-nucleon collision when previously it was 2.76 TeV. The first thing one would like to measure is the increase in the number of particles produced. Whilst the run was still ongoing the full ALICE computing machinery swung into action to start processing the data. A team led by Lee Barnby (Birmingham and CERN) were busy analysing this new data and writing an associated paper. As a result of more than a few late nights it was ready to present publicly for the first time at CERN's end-of-year review, which also marked the end of the Director-General's tenure, on 18 December. The key finding is that the number of particles emerging from the collision reaches almost 2000, per unit of pseudorapidity, for the most central 'head-on' collisions, an increases of 20% in the multiplicity density. This has implications for the energy density, temperature and lifetime of the hot QCD matter created in the collision. A pre-print, of the PRL submission, is available at http://arxiv.org/abs/1512.06104.
Contribution by Lee Barnby lbarnby@cern.ch (Birmingham)

3. Outreach Activity

Nuclear Physics Masterclass – University of Birmingham

This nuclear physics masterclass was held at Birmingham on Thursday 14th January 2016. The masterclass was attended by 48 A level students from seven schools/colleges. This was a new event motivated by the success of nuclear physics masterclasses held at the Universities of Liverpool, Surrey and at Daresbury Laboratory in previous years. It was organised by Tzany Kokalova and Maria Pavlidou (schools liaison officer). The day included two nuclear physics lectures given by Martin Freer, a tour of the Birmingham

cyclotron and a visit to the radiations labs with Carl Wheldon. Peter Jones also gave a lecture on the ALICE experiment at CERN and a talk about the career opportunities a general physics degree and a nuclear physics specialism can open up. The day finished with a nuclear physics quiz, in which the students

scored very highly. The event was also supported by the STFC particle and nuclear physics outreach officer Elizabeth Cunningham, two PhD students and several undergraduates from the Birmingham physics department.

Contribution by Elizabeth Cunningham
elizabeth.cunningham@stfc.ac.uk
(STFC/Surrey)

STFC PUBLIC ENGAGEMENT FELLOWSHIPS SCHEME – 2016

The 2016 round of the STFC Public Engagement Fellowships scheme is open for applications. These fellowships 'buy out' a fraction of a researcher's time to dedicate to public engagement.

STFC PE Fellowships are open to any applicant who can demonstrate a strong track record of research in an STFC-funded area of science and technology, or can demonstrate a strong track record of research that has been underpinned by use of STFC's national laboratories and facilities.

Applicants must have a demonstrable record of success in planning, delivering, and evaluating public engagement activities to a wide range of audiences.

The closing date is Thursday 25th February 2016 at 4.00pm.

The scheme is administered by the STFC Public Engagement Team

Outreach Opportunity for Women: Soapbox Science

Soapbox Science is a science outreach initiative that aims to simultaneously bring science to the streets, and increase the visibility of women in science. We are currently recruiting speakers for our Soapbox Science Summer 2016 - we have 13 events taking place around the country: London, Bristol, Exeter, Cardiff, Belfast, Cambridge, Oxford, Edinburgh, Southampton, Manchester, Milton Keynes, Hull and Newcastle. To find out more about Soapbox Science take a look at our video here: https://www.youtube.com/watch?v=eqC2DIB5Ccw.

Who can apply to be a speaker? Any woman who is an active scientist - from PhD student to professor, academic, research institute or industry. And 'science' includes the full STEMM (Science, technology, engineering, maths and medicine).

Why should I want to be a Soapbox Scientist? Because you're an amazing woman in science in the UK; because you conduct awesome science that you are burning to share with the public; because you care about the issues facing women in science and want to make a public stand for the visibility of the current and future generations of female scientists.

What's in it for me? Training; top tips from science communication celebrities (e.g. Robin Ince); be part of a growing network of Soapbox Scientists across the UK; make your Dean/Head of Dept/advisor sit up and take

more notice of you; the potential for local, national and even international press coverage of you and your work (e.g. http://soapboxscience.org/?page_id=19); support from one of our sponsors.
For women who are STFC-funded, and/or conducting STFC-relevant research we can fully fund your involvement! That includes travel, props, and expenses for the event and training, and lots of publicity from the Research Councils!

How do I apply? The application process is really easy - it's an online form that can be completed in about 5 mins!
If you'd like to know more about Soapbox Science, and/or you'd like to apply to be a speaker at one of our events this year, visit www.soapboxscience.org.
Website: www.soapboxscience.org
Twitter: @SoapboxScience
General enquiries: soapboxscience@gmail.com

---

4. Media Interactions

Nuclear Waste
John Roberts was consulted on the BBC online article:
Hardest sell: Nuclear waste needs good home
'Dr John Roberts, from University of Manchester's School of Physics and Astronomy, says: "Everything around us, including us, is radioactive to some extent. Your body is evolved to cope with a lot of this.'
Contribution by John Roberts
j.w.roberts@manchester.ac.uk (Manchester)

New elements
Gemma Wilson was interviewed on 5 live Drive on Monday 4th January 2016. She was responding to the news that the new elements, 113, 115, 117 and 118, are to be added to the periodic table.
New elements discovery is 'amazing' says physicist
Contribution by Elizabeth Cunningham
elizabeth.cunningham@stfc.ac.uk
(STFC/Surrey)

The radiation poisoning of Alexander Litvinenko
In connection with the publication on 21st January of the report of the public enquiry into the death of Alexander Litvinenko in 2006, and the role of polonium-210 poisoning, Paddy Regan appeared on the Victoria Derbyshire show (approx. 40 minutes in)

on BBC2 on the morning of 21st January, and Phil Walker was on Sky News that evening. They provided information on the properties of polonium-210.
Contribution by Phil Walker
p.walker@surrey.ac.uk and Paddy Regan
p.regan@surrey.ac.uk (Surrey)

North Korean H-bomb tests
Paddy Regan gave multiple live radio interviews about the alleged North Korean H-bomb tests:
BBC Radio 5 Live Breakfast show (with Nicky Campbell), BBC Radio 1 Newsbeat and BBC General News Service (around 20 local radio stations). The Newsbeat interview was written up on the BBC news website at
http://www.bbc.co.uk/newsbeat/article/35242069/what-is-a-h-bomb
Contribution by Paddy Regan
p.regan@surrey.ac.uk (Surrey)

BBC filming at Birmingham Cyclotron
On Saturday 28th November, Jim Al-Khalili and his BBC television crew came to film a live experiment at the Birmingham cyclotron for his up-coming series about the birth and death of the Universe.

The experiment produced the Hoyle state in Carbon-12, live for the cameras and made use of the Birmingham group's silicon strip detector array and large scattering chamber. The new series is planned to be aired in the first half of 2016.
Contribution by Tzany Kokalova Wheldon
t.kokalova@bham.ac.uk and Carl Wheldon
(Birmingham)