Nuclear Physics in Astrophysics VII
28th EPS Nuclear Physics Divisional Conference

18 – 22 May 2015
The Royal York Hotel, York, UK

http://npa7.iopconfs.org

Organised by the Institute of Physics in conjunction with
the Universities of York and Edinburgh
Contact information
If you have any questions, please contact the conferences team by telephone or email. There will be at least two IOP representatives on-site throughout the conference in case you have any queries.

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Institute of Physics

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Programme organiser
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Conferences team
E-mail: conferences@iop.org

Organising committee
Co-chairs: Marialuisa Aliotta, University of Edinburgh, UK (Co-chair), Alison Laird, University of York, UK (Co-chair)
Charles Barton, University of York, UK, Raphael Hirschi, University of Keele, UK, Alex Murphy, The University of Edinburgh, UK

We hope that your time at the conference is enjoyable. However, should you encounter any problems during your stay, please report them to the registration desk at your earliest convenience. The conference team will make every effort to rectify the issue as soon as possible.

Disclaimer
The Institute of Physics, The Royal York Hotel and their approved representatives cannot take responsibility for any accident, loss or damage to participants or their property during the conference.
**Venue**
The conference will be held at The Royal York Hotel, York, UK. The lectures will take place in the Events Centre, refreshments and lunch will be held in the Oak Room.

**Venue address:**
The Royal York Hotel & Events Centre
Station Road
York
North Yorkshire, YO24 1AA, UK

For information about the venue, please visit their website: [www.principal-hayley.com/locations/yorkshire/royal-york/](http://www.principal-hayley.com/locations/yorkshire/royal-york/)

Delegates should enter the building via the main entrance on Station Road. A map of the hotel highlighting the location can be found at the back of this handbook.

**Accommodation**
For those participants who have booked accommodation at the Royal York Hotel, during online registration, bedrooms are en-suite and benefit from tea/coffee making facilities, a working area, free Wi-Fi and daily room service. All rooms are single occupancy only, unless a twin room has been requested.

Accommodation includes a full English breakfast or continental breakfast and is served in the Tempus Restaurant daily between 07:00 – 10:00.

Bedrooms will be available from 15:00 on day of arrival and should be vacated by 11:00 on the day of departure. Keys should be collected from the hotel reception desk. The reception desk is manned 24 hours a day, 7 days a week.

If you require accommodation and make any changes to an existing booking, please email Dawn Stewart, dawn.stewart@iop.org. A limited number of rooms are still available.

**Internet access**
Wi-Fi access is freely available throughout the venue and bedrooms. The login details are as follows:

Username: IOP
Password: IOP

**Registration**
Registration will be located in the Hotel Lounge on Sunday. On all other days registration will be in the Events Centre Foyer. Times are as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Times</th>
<th>Location</th>
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<tbody>
<tr>
<td>Sunday 17 April</td>
<td>16:00 – 18:00</td>
<td>Hotel Lounge</td>
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<tr>
<td>Monday 18 April</td>
<td>08:00 – 17:00</td>
<td>Events Centre Foyer</td>
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<td>Tuesday 19 April</td>
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On arrival, each participant will receive a delegate pack containing a pen and a pad, conference programme and a badge. Please wear your badge at all times because this will help with security as well as enable you to identify your fellow delegates. Replacement badges can be issued at the registration desk. On your departure, please return your badge to the registration desk so that it can be recycled.

Catering

Refreshments and lunch are included in the registration fee and are served at set times during the conference programme. Can you please wear you name badge as to identify you with the catering company.

<table>
<thead>
<tr>
<th>Monday 18 April</th>
<th>Times</th>
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<tr>
<td>Breakfast (residential delegates only)</td>
<td>07:00 – 10:00</td>
<td>Tempus Restaurant</td>
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<tr>
<td>Morning refreshment break</td>
<td>10:30 – 11:00</td>
<td>The Oak Room</td>
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<tr>
<td>Lunch</td>
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Dietary requirements

Participants with special dietary requirements are asked to notify the conference office by e-mail prior to their arrival if they have not already done so when registering. Those with special dietary requirements other than vegetarian are asked to make themselves known to the catering team. It will not be possible to provide an alternative menu unless prior notification has been received.

Please note following statement from The Royal York hotel catering supplier,
ALLERGEN POLICY STATEMENT
The Royal York Hotel takes the issue of food allergies very seriously. We have always strived to ensure our guests with special dietary requirements are well catered for with foods that are safe for them to eat. In line with new regulations that came into force in December 2014 we have introduced additional controls. We are required to provide information about the content of food produced on our premises with particular regard to 14 recognised Allergens and make this available to customers.
Social programme
Monday 18 May
Time: 17:15 – 18:00 - A welcome drinks reception will be held in the Oak Room for all registered delegates.
Time: 18:00 – 19:30 – A whisky tasting session will follow the drinks reception. This event will take place in the Events Centre lecture room.

Tuesday 19 May – Time: 17:10 – 19:30
An exhibitors’ drinks reception will be held in conjunction with the poster session in the Oak Room for all registered delegates. Please take time to visit the exhibition.

Wednesday 20 May – Time: 14:00 – 18:00
Conference excursion in Yorkshire.
An excursion will take place through the Yorkshire countryside for delegates who registered in advance to attend. This event is included in your registration fee. A coach will depart from outside The Royal York Hotel at 14:00 and return at approximately 18:30. We would strongly advise delegates to wear comfortable footwear and sensible clothing for this event, due to the unpredictable UK weather.

The above events are included within your registration fee.

Thursday 21 May – Time: 19:00 – 22:00
Conference Gala dinner and drinks reception
The Merchant Adventurers’ Hall, Fossgate, York, North Yorkshire, YO1 9XD
The conference dinner will take place in the Merchant Adventurers’ Hall, York. This venue is approximately 20 minutes’ walk from the Royal York Hotel. The cost to attend the conference gala dinner and drinks reception is £55.00 per person, if you have not booked the conference dinner during online registration. Please be aware that stiletto heels are not allowed so as to avoid damaging the wooden flooring in the Hall.

Information for presenters

Oral presentations
The main lecture theatre offers in-built AV presentation facilities supported by dedicated on-site technician. The lecture theatre is equipped with the following audio-visual equipment:

- Data projector and screen
- PC or laptop with Windows XP
- Remote mouse/laser pointer
- Lectern microphone
- Lapel and/or hand-held radio microphones

Presenters are asked to prepare their presentations to match the time allocated in the programme as these will be strictly enforced by the conference chairs.

- Invited talks (30 minutes) 25 minutes + 5 minutes for questions
- Contributed talks (20 minutes) 15 minutes + 5 minutes for questions

Speakers are requested to bring their presentation on a USB memory stick in either Office 2010 or .pdf format and preload it onto the PC/laptop located in the lecture theatre. Speakers should save their presentation into the appropriate pre-named session folders pre-set on the desktop and files should be saved by speakers surname and initial. To optimise compatibility, particularly for the inclusion of multimedia components, speakers should include
the original files so that it can be re-embedded if necessary. Direct connection of personal laptops (with set up in the break prior to the corresponding session) is an acceptable but not preferred alternative. Mac users should ensure that they bring the correct connection cable (VGA) with them. The electrical current in the UK is 230v AC and 3 pin plug sockets. If you need an adapter, please bring one with you.

The lecture theatre is reasonably large, and speakers should use a minimum 16-point font size in PowerPoint slides to ensure legibility. Presenters are asked to prepare their talks to match the allocated times which will be rigidly enforced.

**Poster presenters**
The poster session will take place from 17:10 – 19:30 on Tuesday 19 May. Authors are asked to remain next to their posters during the poster session, for as much time as possible to answer questions. Please visit [http://npa7.iopconfs.org](http://npa7.iopconfs.org) to view the poster programme.

**Displaying and removing posters**
Posters can be mounted from 10:30 on Monday 18 May and must be removed by 11:00 on Friday 22 May. Any posters not removed by this time, will be recycled.

**Dimensions**
Posters must be **no larger than A0** in size (118.9 x 84.1cm / 46.8 x 33.1 inches), in a **portrait format** if your poster does not fit within these dimensions, we cannot guarantee it will be displayed. Fixing material will be supplied.

**Content**
Posters are a visual presentation of your research and as such we recommend that you use schematic diagrams, graphs and tables, where possible, rather than just text. Please use an appropriate sized font so the information is legible at a distance of 1 metre.

Your poster should include the title, author’s name, and affiliations with the presenting author underlined. We recommend that this information is placed top centre of the page. For the poster, we recommend that you include an abstract, method section, results section and a conclusion or summary. You might also want to list key references or acknowledgements. If you decide to structure your poster differently, please ensure you format the poster with clear headings and keep text to a minimum.

**Scientific programme**
Please refer to the NPA website at [npa7.iopconfs.org](http://npa7.iopconfs.org) for the latest programme. A printed copy of the programme will be available on arrival.

**Exhibition**
A table top exhibition will be held in the Oak Room area from Tuesday 19 to Thursday 21 May. Exhibitors include:

- Canberra UK Limited – Stand 1
- Hamamatsu Photonics UK Ltd – Stand 2
- Institute of Physics Publishing – Stand 3
- Kromek – Stand 4
- Micron Semiconductor Limited – Stand 5
- EDF Energy – Stand 6

Please take time to visit the exhibition and meet the exhibitors.
CANBERRA UK Ltd
CANBERRA UK Ltd is one of the UK’s leading suppliers of instrumentation for a diverse range of applications in the nuclear industry. We aim to work closely with our customers to ensure that we provide innovative, high quality products, measurement systems and services. CANBERRA UK Ltd is an AREVA company.
www.canberra.com

Hamamatsu Photonics UK Ltd
Hamamatsu Photonics offers a variety of devices to meet the challenging demands of Nuclear Physics and Astrophysics, from the smallest (16mm) to the largest (20inch) PMT in the world and the unique Flat Panel PMT with 256 channels. Also offered are silicon strip detectors and Silicon Photomultiplier arrays (MPPCs).
www.hamamatsu.com

Institute of Physics Publishing
IOP Publishing provides a range of journals, books, websites, magazines, conference proceedings and services through which leading-edge scientific research is distributed worldwide.
IOP Publishing is central to the Institute of Physics, a not-for-profit society. Any financial surplus earned by IOP Publishing goes to support science through the Institute’s activities.
http://ioppublishing.org

KROMEK Group Plc
KROMEK Group Plc is a leading developer of radiation detection solutions based on high performance sensor materials, primarily cadmium zinc telluride (CZT) for applications within the medical, nuclear and security screening markets.
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NEW PRODUCTS - High Efficiency Silicon Neutron Detectors / Ultra Thin 10nm silicon windows for x-ray/electron imaging / Single Crystal Diamond Detectors, picoampere/picosecond response. 0.5V/um efficiency. Medipix/Timepix/Velopix 6 inch pixel wafers, this range 70um-700um, P&N Type / Rugged thick-thin 10um-30um Silicon Delta E Detectors with 0.1um uniformity.
www.micronsemiconductor.co.uk

EDF ENERGY
EDF Energy produce low-carbon electricity through a diverse portfolio of Nuclear, Coal and Wind generation. The company own and operate 14 Advanced Gas-cooled Reactors (AGRs) and one Pressurised Water Reactor (PWR) within the UK and is currently building the UKs next-generation nuclear fleet.
www.edfenergy.com

Travel
The Royal York Hotel is conveniently next door to York mainline railway station and just two hours by rail from London and Edinburgh. It’s also a 20 minute drive to the A1 and has links to major motorway networks. Leeds Bradford International Airport is a 40 minute drive.

By air
There are good travel links from the following airports: Gatwick, Heathrow, Stansted, Leeds Bradford, Luton, Manchester and Newcastle.

By rail
York is on the main East Coast Line from London King’s Cross to Edinburgh. Fast trains leave from both north and south at frequent intervals. There is also a direct service across the Pennines between York, Leeds and Manchester Airport. The hotel is conveniently next door to York mainline railway station. For information contact National Rail Enquiries (tel: +44 (0)8457 484950).

By coach
You can reach York by coach from many destinations around the country. National Express buses stop at the railway station. More details are available from their online coach timetable.

By car
The hotel is located a 20 minute drive from the A1 and has links to major motorway networks. You can plan your route online using one of the free route planners - examples are The AA (www.theaa.com) or The RAC (www.rac.co.uk)

Car parking
On-site car parking is available on a first-come first-served basis. The hotel has approximately 110 car parking spaces. Space is charged at £8.00 per 24 hours and £6.00 for up to 6 hours. Delegates requiring a car parking space will need to contact the hotel direct.
Health and safety

Safety and emergency procedures
All of the areas used by the Conference are covered by the Hotel’s Fire Alarm system, including the bedrooms. Delegates are expected to leave the building as quickly and safely as possible and make their way to a Fire Assembly Point, on the lawn directly in front of the hotel. A fire alarm test will take place on Monday 18 May at 11:00.

Smoking
In accordance with government legislation smoking is not permitted in any building, temporary enclosed structure or substantially enclosed space outside of buildings.

First aid
If you fall ill or injure yourself during the conference, please report the incident to a staff member who will call a trained first-aider. In case of serious injury, paramedics will be called. All three emergency services, fire, ambulance and police, can be contacted by dialling 999 from any telephone.

Some medicines are available over the counter from pharmacists. For medical advice, try NHS by telephone on 111 (24-hour within the UK) or visit the website at www.nhs.uk.

Behaviour and conduct
The Institute of Physics reserves the right to charge in full for loss or damage to buildings and property.

General information

Payment
The organiser reserves the right to refuse admission to any participants who has failed to pay their registration fee in full prior to the start of the event.

Money
Britain’s currency is the pound sterling (£). There are cash machines throughout York city centre and major credit cards are accepted.

Electricity
British electrical standards are 50Hz 230 volts, so some North American and European electrical devices may require converters; all will require plug adaptors (please bring your own adaptors to the conference).

Visas
Citizens of the European Union do not need a visa to enter Britain. If you are from any other country, find out about visa requirements before you travel by visiting http://www.ukba.homeoffice.gov.uk/visas-immigration/

Tourist information
For additional information about York, please visit, the Tourist Information Service website at http://www.visityork.org/

IOP Membership
Non-member registrants attending this conference will automatically become affiliate members of the Institute of Physics for 12 months and will receive copies of Physics World. As an affiliate member you will be entitled to attend
all conferences at the members’ rate for the period of your membership and to use MyIOP – the member-only network.

Full details will be sent to you after the conference. In order to take advantage of this affiliate membership, payment for the conference registration fee must be received in accordance with our payment terms.

Membership of the Institute of Physics is open to all those with an interest in Physics. For further information, please visit http://members.iop.org or email membership@iop.org.

Taxis
Local taxi firms
Stream Line: +44(0) 1904 656565 - http://www.streamlinetaxisyork.co.uk/
Fleetways: +44(0) 1904 365 365 - http://www.fleetways.co.uk/
Station Taxis +44(0) 1904 623 332 - http://www.yorkstationtaxis.co.uk/

Messages
A message board will be placed near the registration desk. Participants should check the board for messages as an attempt to locate participants will only be made in the case of an emergency. During registration times, messages can be left by email to dawn.stewart@iop.org or by telephone to +44 (0)79171 81183

Cloakroom
Coats can be left with the hotel concierge or on a coat stand which will be provided in the Events Centre. All goods left in this area are at the owner’s risk and neither the IOP or the Royal York Hotel accept any liability for any loss or damage to personal goods.

Prayer room
There isn’t a dedicated prayer room in the venue, so anyone wishing to make use of a meeting room facility should make a request to the IOP registration desk.
The organisers would like to thank the sponsors for their contribution towards this conference.

Canberra

EPS (European Physical Society)  EPL (Europhysics Letter)

JINA-CEA

mesytec

Royal Astronomical Society  SUPA
FORTHCOMING INSTITUTE CONFERENCES
MAY 2015 – JULY 2017

2015
18–22 May
Nuclear Physics in Astrophysics VII: 28th EPS Nuclear Physics Divisional Conference
The Royal York Hotel & Events Centre, York, UK
Organised by the IOP Nuclear Physics Group

1–3 June
Theory Meets Experiment: Molecular Nanoscience and Applications
University College London, London, UK
Organised by the IOP Nanoscale Physics and Technology Group

9–10 July
Physics of Emergent Behaviour II
Science Museum, London, UK
Organised by the IOP Biological Physics Group

23–28 August
IPELS 2015
Atholl Palace Hotel, Perthshire, UK
Organised by the IOP Plasma Physics Group

26–28 August
Institute of Physics, London, UK
Organised by the IOP Shock Waves and Extreme Conditions Group

1–4 September
International Conference on Quantum, Atomic, Molecular and Plasma Physics (QuAMP 2015)
University of Sussex, Brighton, UK
Organised by the IOP Quantum Optics, Quantum Information and Quantum Control Group

6–9 September
Sensors & their Applications XVIII
Kingston University, Surrey, UK
Organised by the IOP Instrument Science and Technology Group

8–10 September
Physical Aspects of Polymer Science
Manchester Institute of Biotechnology, Manchester, UK
Organised by the IOP Polymer Physics Group

7–8 December
Quantitative Methods in Gene Regulation III
Corpus Christi College, Cambridge, UK
Organised by the IOP Biological Physics Group

2016
13–15 January
15th Anglo-French Physical Acoustics Conference
Selsdon Park Hotel, Surrey, UK
Organised by the IOP Physical Acoustics Group

7–8 April
EMAG 2016
Durham University, Durham, UK
Organised by the IOP Electron Microscopy and Analysis Group

3–6 July
EUFoAM 2016
Trinity College Dublin, Dublin, Ireland
Organised by the IOP Liquids and Complex Fluids Group

3–9 July
The XXVII International Conference on Neutrino Physics and Astrophysics
Royal Geographical Society, London, UK
Organised by the Institute of Physics

22–26 August
Joint European Magnetic Symposia (JEMS)
SECC: Scottish Exhibition and Conference Centre, Glasgow, UK
Organised by the IOP Magnetism Group

5–8 September
Photon16
University of Leeds, Leeds, UK
Organised by the IOP Computational Physics, Environmental Physics, Instrument Science and Technology, Optical, Quantum Electronics and Photonics, Quantum Information and Quantum Control Groups

2017
16–20 July
19th IUPAB Congress and 11th EBSA Congress
Edinburgh International Conference Centre, Edinburgh, UK
Organised by the Institute of Physics and British Biophysical Society

See www.iop.org/conferences for a full list of IOP one-day meetings.

The conferences department provides a professional event-management service to IOP’s subject groups and supports bids to bring international physics events to the UK.

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