

# Magnetism 2019

**8–9 April 2019**  
**University of Leeds, UK**

Organised by the IOP Magnetism Group

<http://magnetism2019.iopconfs.org>



# Magnetism 2019

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## Contacts

Please read this handbook prior to the event as it includes all of the information you will need while on-site. If you do have any questions or require further information, please contact a member of the conferences team.

### General enquiries

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Email: [priscilla.lim@iop.org](mailto:priscilla.lim@iop.org)

### Programme enquiries

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### Conferences

Tel: +44 (0)20 7470 4800  
Email: [conferences@iop.org](mailto:conferences@iop.org)

We hope that your time at the conference is trouble free. If you do encounter any problems, please report them to the conferences team who will make every effort to rectify the issues as soon as possible.

## Disclaimer

The Institute of Physics, University of Leeds and their approved representatives accept no responsibility for any accident, loss or damage to a participant's property during the conference.

## Organising committee

- Dr Thomas Moore, University of Leeds, UK
- Dr Tom Hayward, University of Sheffield, UK
- Dr Liam O'Brien, University of Liverpool, UK
- Dr Thomas Ostler, Sheffield Hallam University, UK

## Social media

Follow and join the conversation at [#IOPmag2019](https://twitter.com/IOPmag2019) and [#physicsconferences](https://twitter.com/physicsconferences)

## Sponsors

Conference dinner - Monday 8 April

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# Magnetism 2019

## Venue

The conference will be held in The Edge and Exhibition Centre at the University of Leeds.

The Edge and Exhibition Centre  
University of Leeds  
Leeds  
LS2 9JT  
United Kingdom

[Google Map](#)

The talks will be held in Auditorium 1 and 2. Refreshments and lunch will be held in Exhibition Hall 2, alongside the poster session and exhibition. A campus map can be found at the end of this handbook.

Interactive campus map: <http://www.leeds.ac.uk/campusmap>

## Travel

For travel information, please refer to the website <http://magnetism2019.iopconfs.org/travel>

## Programme

For the latest programme information, please refer to the conference website

<http://magnetism2019.iopconfs.org>.

A print copy of the programme will be included in your delegate pack if requested during registration.

The abstracts are available in digital format only and can be download from the website or the IOP Conferences mobile app.

## Registration

Registration will be held in Exhibition Hall 2 of The Edge and Exhibition Centre at the times listed below. All attendees will receive a registration pack which will include a printed programme\*, delegate list\*, a pen and pad, and a conference badge.

*\*pre requested during registration only*

The abstract book is available in digital format and can be downloaded from the conference website. If you want a copy to refer to while on-site, please save or print a personal copy.

Participants are asked to wear their badge at all times to help with security and to enable you to identify fellow participants. Replacement badges can be issued at the registration desk at a cost of £2.50 each.

Monday 8 April                      09:00-18:30

Tuesday 9 April                    08:30-17:00

Outside of these times and only in the case of emergency, please telephone +44 (0)7917 384 699

## Payment

The organiser reserves the right to refuse admission to any participant who has failed to pay their registration fee prior to the event.



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## Catering

The registration fee includes refreshments for the duration of the event, lunch on Monday and Tuesday and the full social programme. Catering for the conference will be held in Exhibition Hall 2.

## Social programme

**Exhibition and poster reception** - A drinks reception will be held on Monday 8 April in Exhibition Hall 2 from 16:00-17:30 alongside the exhibition and posters. You will be provided with 2 tokens which you can exchange for drinks, in your delegate packs.

**Conference dinner** - A reception and conference dinner will be held at [The Queens Hotel](#) located approximately 0.8 miles (15 minute walk) from the University.

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The Queens Hotel  
City Square,  
Leeds LS1 1PJ

Participants should arrive at the hotel for 19:00 for the pre-dinner reception. Dinner will be served from 19:30. No transport to and from the dinner is provided.

## Dietary requirements

Participants who have notified us of any dietary requirements will be catered for. Please make yourself known to the catering team.

It will not be possible to provide an alternative menu unless prior notification has been received. Please email [priscilla.lim@iop.org](mailto:priscilla.lim@iop.org) if you have any questions.

## WiFi

Wi-Fi codes will be distributed on arrival.

## Presenter instructions

### Oral presentations

The lecture theatres are equipped with the following audio-visual equipment:

- Data projector
- Screen
- Lapel or hand-held radio microphones
- Laser pointer
- PC/Laptop
- Lectern (fixed) and microphone



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Speakers are requested to bring their presentation on a USB memory stick in either Office 2010 powerpoint 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 lecture theatres are reasonably large, so 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.

The aspect ratio for the Conference Auditorium screens are 16×9.

## Poster presenters

Posters will be on display in Hall 2 in The Edge and Exhibition Centre with dedicated poster session/s as scheduled in the programme.

Please note that during poster sessions, authors should stand close to their boards to answer questions and facilitate discussions on their work. If you are presenting a poster please ensure that you display your poster on the board number that matches your poster number in the programme.

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.

All posters can be mounted between 11:15 and 13:00 on Monday 8 April and removed by 15:45 on Tuesday 9 April. Fixing material will be supplied.

## Conference APP

In preparation for the meeting, you can now download the mobile conference app by following the instructions below:

- Amend your registration [here](#) – you will need to use the same username and password that you registered with
- Select “I wish to opt in to use the conference app” (displayed after the Wohlfarth donation)
- Download “eventsforce” app from your playstore or app store
- Once the app is downloaded, please create an account (using the same email address as your registration)
- Click on the code link next to the search box and type “MAG2019”
- Download the event so you can access it more easily every time you open the app
- Open and enjoy!



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## Exhibition

The exhibition will be held in Exhibition Hall 2 alongside refreshments, lunch and the drinks reception. Please take the time to visit the exhibitors to find out about their products and services. A floor plan can be found at the end of this handbook.



### **attocube systems AG (stand 7)**

[www.attocube.com](http://www.attocube.com)

attocube offers a broad portfolio of customizable liquid and dry research cryostats for diverse setups and conditions. Due to their low vibration characteristics, these cryostats are predestined to be combined with our microscopes, nanopositioners, cryogenic objectives and interferometric sensors, and thus offer the perfect conditions for multiple research tasks.



### **Cryogenic Ltd (stand 8)**

[www.cryogenic.co.uk](http://www.cryogenic.co.uk)

Cryogenic Limited produces a range of customised superconducting magnet systems, including solenoids to 22 Tesla, split pairs to 14 Tesla and magnets for neutron beamline environments. Our standard measurement systems include magnets for NMR, EPR, SQUID and vibrating sample magnetometers. These configurations are offered as either cryogen free or liquid helium cooled systems.



### **Durham Magneto Optics Ltd (stand 5)**

[www.durhammagnetooptics.com](http://www.durhammagnetooptics.com)

We specialise in advanced scientific instrumentation for nanotechnology research and development. Our product range includes a family of magneto-optical Kerr effect magnetometers (NanoMOKE3) and a family of direct-write laser lithography machines (MicroWriter ML).



### **Elliot Scientific Ltd. (stand 9)**

[www.elliotscientific.com](http://www.elliotscientific.com)

Elliot Scientific is the Lake Shore representative for the UK and Ireland. Lake Shore's products for materials research and characterization include high-sensitivity VSM and Hall Effect systems, plus cryogenic probe stations with integrated magnetic field.



### **Farnell element14 (stand 6)**

[uk.farnell.com](http://uk.farnell.com)

Your global partner that supports the technology community at every stage. From developing the dreams of students and makers to





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helping professional engineers develop their ideas and products, we build a community that benefits from our technology. Our solutions increase productivity and keep lines running developing our customers' businesses.



## Henniker Scientific Ltd (stand 11)

[www.henniker-scientific.com](http://www.henniker-scientific.com)

Henniker Scientific supply the complete range of Prevac scientific instruments, control devices & multi-technique systems for the deposition, growth and analysis of solid state materials. Our product portfolio includes UHV manipulators and sample transfer systems, sources (ion, electron, x-ray and UPS), analysers (XPS, quadrupole mass spectrometers, LEED, RHEED and SPM) and complete thin film growth systems which can be standalone or in combination with various analysis techniques. We specialise in combination UHV systems but also provide simple and effective upgrade devices such as bakeout controllers, sample heating power supplies and deposition rate controllers.



## Leybold UK Ltd (stand 14)

<https://www.leybold.com/en/>

Leybold has been offering customers the largest sales and after sales network in the vacuum technology industry for over 165 years. Our range includes fore and high vacuum pumps, vacuum gauges, leak detection instruments, flanges, fittings and valves, as well as complete vacuum solutions. Full UK local service support is offered.



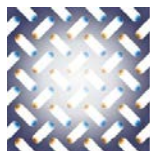
## Mantis Deposition Ltd (stand 3)

[www.mantisdeposition.com](http://www.mantisdeposition.com)

Mantis Deposition is a specialist instrumentation company developing high quality deposition components and systems used by researchers at the forefront of thin-film device technology development. Our products are designed for all cutting-edge materials research; including magnetics, optoelectronics, energy storage and renewables, catalysis and nanoelectronics incorporating OLED, semiconductor and even new graphene-type materials.

With over 130 deposition systems delivered globally to corporate research centres, national laboratories and universities we offer comprehensive technical support for all our customers.





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*The Business of Science®*

## Oxford Instruments Nanoscience (stand 10)

[nanoscience/oxinst.com](http://nanoscience/oxinst.com)

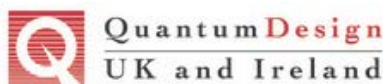
Oxford Instruments NanoScience designs, supplies and supports market-leading research tools that enable quantum technologies, new materials and device development in the physical sciences. Our tools support research down to the atomic scale through creation of high performance, cryogen free low temperature and magnetic environments, based upon our core technologies in low and ultra-low temperatures, high magnetic fields and system integration, with ever-increasing levels of experimental and measurement readiness. Oxford Instruments NanoScience is a part of the Oxford Instruments plc group.



## PI-KEM Ltd (stand 4)

[www.pi-kem.co.uk](http://www.pi-kem.co.uk)

Specialist suppliers of advanced materials & equipment for scientific research & development. With over 25 years of experience, we custom manufacture to exact specifications and have expertise in sourcing niche products through our trusted network of worldwide suppliers. We also offer a range of standard stock lines, available from our website for immediate despatch.



## Quantum Design UK and Ireland Ltd (stand 2)

[www.qd-uki.co.uk](http://www.qd-uki.co.uk)

Quantum Design UK and Ireland are one of the leading distributors of high-tech instrumentation and consumables for scientific, academic and industrial research. Visit our stand to discuss our range of Physical Property Measurement Systems, Magnetometers and Optical Cryostats.



## UK Magnetics Society (stand 13)

[ukmagsoc.org](http://ukmagsoc.org)

The UK Magnetics Society supports magnetics professionals in all fields and countries.

Our membership is drawn from industry, government and academia. We focus on materials and machines, but we cover all areas of magnetics including superconductivity, spintronics, measurement, transport, medical, thin films, sensors, high fields, CAD, generation, transformers, etc.



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## University of Leeds (stand 12)

[www.leeds.ac.uk/bragg](http://www.leeds.ac.uk/bragg)

The Bragg Centre for Materials Research is a major new initiative at the University of Leeds. The Centre aims to discover, create and design new materials. We bring together scientists and engineers across a wide range of disciplines and work with industry and other partners to develop new insights and solutions for innovative products, devices and applications. We provide world-leading experimental and analytical facilities to understand and build materials from the atomic to the macro-scale. We are a founding partner of the Henry Royce Institute, the UK's centre for advanced materials research and innovation.



## Zurich Instruments AG (stand 1)

[www.zhinst.com](http://www.zhinst.com)

Zurich Instruments is a test and measurement company based in Zurich, Switzerland, developing and selling measurement instruments and delivering customer support in key markets around the world, either directly or with carefully selected partners.

We are a growing, independent and founder-led company. Zurich Instruments makes cutting-edge instrumentation for scientists and technologists in advanced labs who are passionate about phenomena that are often notoriously difficult to measure.

## Cloakroom

A manned cloakroom and luggage storage facility will be available in the Exhibition Centre at The Edge. All goods left in these areas are left at the owner's risk and neither the IOP nor University of Leeds accept any liability for any loss or damage to personal goods.

## Safety and emergency evacuation procedures

In the unlikely event of a fire alarm sounding please make your way to the nearest emergency exit. Please leave the building in an orderly manner as directed and assemble outside away from the building. Anyone who has special needs in the event of an emergency should make themselves known to staff on arrival.

## Smoking

Smoking is not permitted anywhere within the building. If you wish to smoke, please use the designated smoking area outside the university.

## First aid

If you fall ill or injure yourself during the conference, please report the incident to a member of staff who will call a trained first-aider. In case of serious injury, paramedics will be called. All members of the conferences team are also trained first aiders.

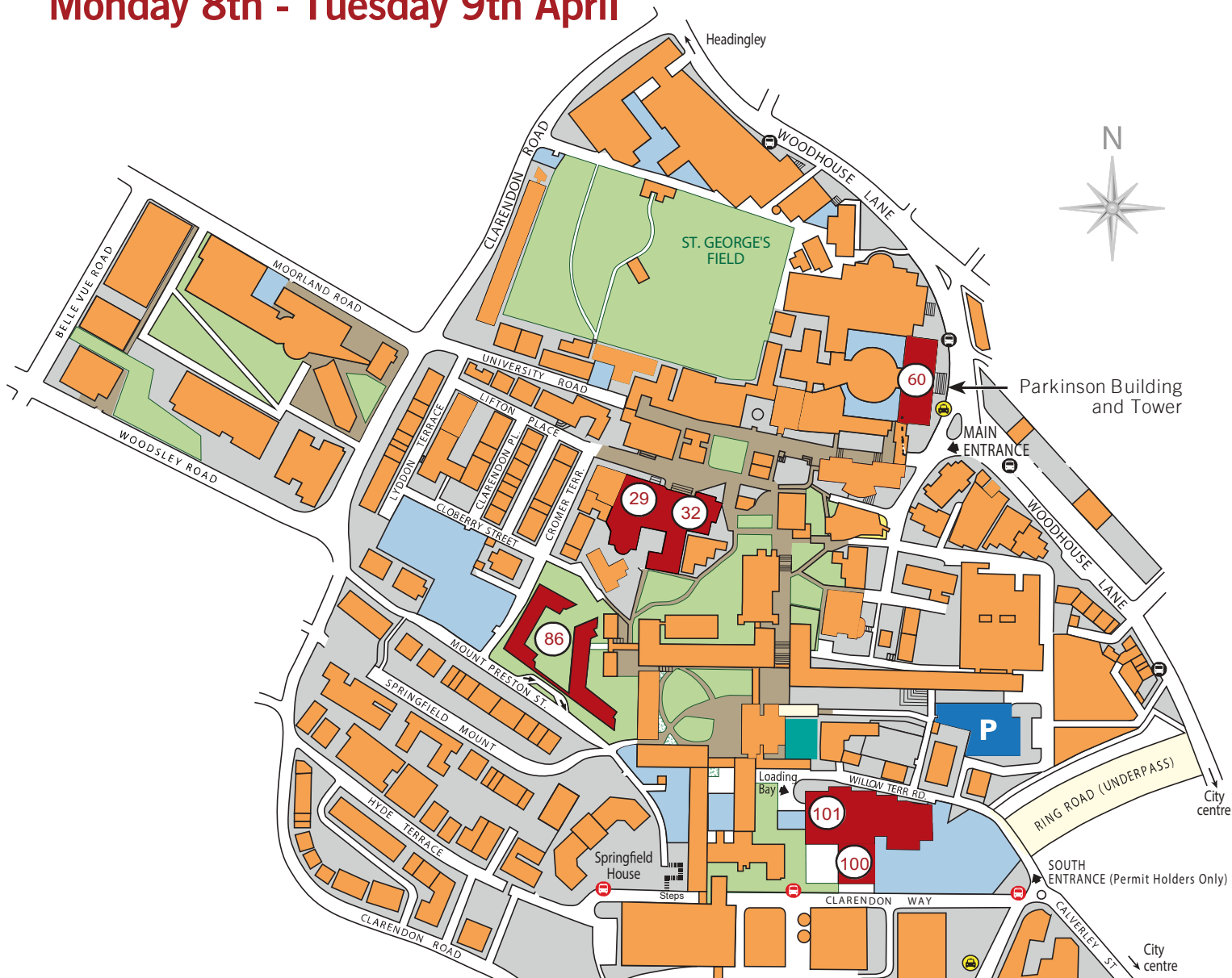


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## General information

- Britain's currency is the pound sterling (£). Credit cards - especially Visa and Mastercard - are widely accepted in restaurants, bars, cafés and shops. American Express and Diners Club cards are less commonly accepted. There are plenty of cash machines (also known as cashpoints or ATMs) available on the campus.
- Value-added tax (VAT) is a 20% sales tax levied on most goods and services except basic food items, books and children's clothing. Restaurants must, by law, include VAT in their menu prices. If you are travelling for leisure or business purposes, you may be eligible for a VAT refund. The VAT refund scheme is called the Retail Export Scheme or Tax-Free Shopping.
- Electricity - British electrical standards are 50Hz 230 volts, so some North American and European electrical devices may require converters; all require plug adapters.
- Telephone - If you're visiting the UK from abroad, the UK dialling code is +44 (which replaces the 0).
- Emergencies - Visitors should be aware of their personal safety. Call 999 for the emergency services (police, fire and ambulance) which is a free call from any phone. You can also call 112 for non-life threatening assistance and to report crimes. To report non-urgent crime, call the police on 101 from within the UK.

### Magnetism Conference 2019 Monday 8th - Tuesday 9th April



#### CONFERENCE VENUES

- The Edge - Sports Halls 1 & 2 (101)
- Conference Auditorium (100)
- The Refectory (29)
- Charles Morris Hall Accommodation (86)

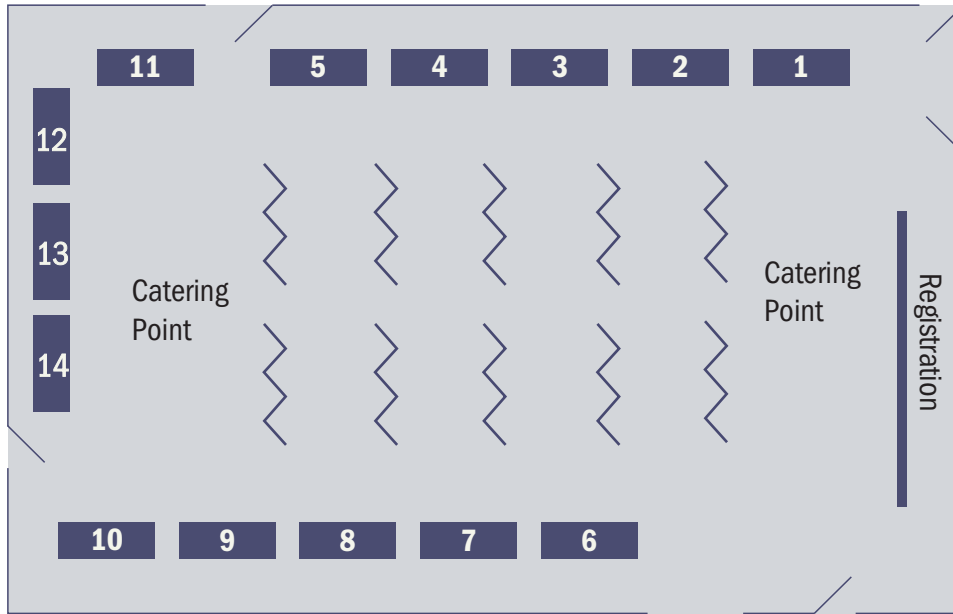
#### OTHER VENUES

- Parkinson Building (60)
- Student Union and Shops (32)

#### OTHER USEFUL INFORMATION

- Orange Zone Multi-Storey (Exhibitors Only) (P)
- Bus Stop (Bus icon)
- Taxi Rank (Taxi icon)
- CityBus Stop (CityBus icon)
- Pedestrian Only Area (Brown shaded area)
- Lawns (Green shaded area)

## Hall 2



## Hall 1





# CMQM (Condensed Matter and Quantum Materials)

**3–5 July 2019, University of St Andrews, St Andrews, UK**

**[cmqm2019.iopconfs.org](http://cmqm2019.iopconfs.org)**

CMQM is the first of an annual series covering current topics of general importance in condensed matter physics, with examples ranging from superconductivity to magnetism and from organic photovoltaics to polaritons and light-matter interactions. The conference will feature plenary talks given by leading scientists in condensed matter physics, invited talks on a number of more specialized topics, as well as parallel sessions with contributed talks and several poster sessions.

## Topics

- Computational Physics Matter Systems
- Devices
- Electronic Structure
- Frustrated Magnetism and Spin Ice
- Hybrid Organic-Inorganic Systems
- Low Temperature Physics
- Magnetism
- Multiferroics
- Nanoscale Physics
- Neutron Scattering
- Organic Semiconductors
- Photovoltaics
- Polaritons
- Semiconductors
- Skyrmions
- Spintronics
- Superconductivity
- Surface Physics
- Strongly Correlated Electron Systems
- Structure of Matter
- Thin Film Quantum Materials
- Topology in Condensed Matter
- 2D Materials

## Plenary Speakers

- Professor Jacqueline Bloch, C2N, CNRS – Universités Paris Sud and Paris Saclay, France
- Sir Andre Geim, University of Manchester, UK
- Professor Laura Heyderman, ETH Zurich – Paul Scherrer Institute, Switzerland
- Professor Steve Simon, University of Oxford, UK
- Professor Julie Staunton, University of Warwick, UK

## Key dates

<b>Abstract submission deadline:</b>	26 April 2019
<b>Early registration deadline:</b>	3 May 2019
<b>Registration deadline:</b>	22 June 2019

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**[iop.org/conferences](http://iop.org/conferences)**

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