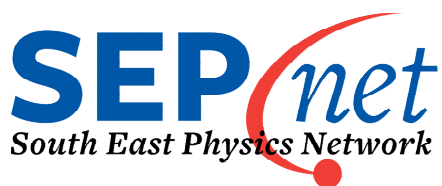


Spring Physics Update

22-24 March, 2013

IOP Institute of Physics



Programme

Friday 22 March

- 12.30 **Registration** and sign-up for workshops
Lunch and refreshments will be provided from 12.30 onwards
Creativity Zone, Pevensey 3 building, level 3 (ground floor), room 3C7
- 13.45 **Welcome to the University of Sussex and the Physics Update**
Organised by SEPnet, the Institute of Physics and the University of Sussex
Creativity Zone, Pevensey 3 building, level 3 (ground floor), room 3C7
- 14.00 **Smoke signals from the distant universe**
Prof. Seb Oliver, University of Sussex
Lecture theatre 1A7, Pevensey 1 building
- 15.00 **Workshop session 1***
Refreshments will be available from 15.45
- 16.30 **Studying the Universe... from 2km underground**
Dr Simon Peeters, University of Sussex
Lecture theatre 1A6, Pevensey 1 building
- 17.30 **Welcome reception**
Creativity Zone, Pevensey 3 building, level 3 (ground floor), room 3C7
- 18.15 Travel by train and check in at the Jury's Inn (beside Brighton rail station)
- 19.30 **Rough Science!**
Dr Jonathan Hare, Freelance Science Educator
Lecture at the Jury's Inn
- 20.30 **Dinner**
At the Jury's Inn

*The following activities are available for workshop sessions 1, 2 and 3:

- **Medical physics to music festivals: embedding careers in your teaching**
– Dr Taj Bhutta, Institute of Physics
- **Teaching practical astronomy** – Dr Robert Smith, University of Sussex
- **Stimulating physics workshop** – Colin Piper, Physics Network Coordinator
- **SEPnet/Sussex experiments to go** – South East Physics Network

Full details and locations of these workshops are listed after this programme.

Saturday 23 March

- 8.00 Breakfast for those staying at the Jury's Inn
- 9.00 Travel to the Department of Physics & Astronomy
- 9.30 **Tour of research laboratories**
Meeting at the Bridge Cafe between the Pevensey 1 & 2 buildings
Refreshments will be available from 10.45
- 11.30 **Physics Education: Making it Better, followed by discussion**
Prof. Peter Main, Institute of Physics
Lecture theatre 1A6, Pevensey 1 building
- 12.45 **Lunch**
With educational resources of the Institute of Physics
Bridge Cafe between the Pevensey 1 & 2 buildings
- 14.00 **From Photons to Molecules: Ion trapping in Sussex**
Dr Matthias Keller, University of Sussex
Lecture theatre 1A6, Pevensey 1 building
- 15.00 **Workshop** session 2*
Refreshments will be available from 15.45
- 16.30 **Mini TeachMeet:** teachers sharing ideas with teachers
Creativity Zone, Pevensey 3 building, level 3 (ground floor), room 3C7
- 17.30 Travel by train to Jury's Inn (Brighton rail station) and free time
- 19.00 **The Most Important Fact in Physics**
Dr John Gribbin, University of Sussex
At the Jury's Inn
- 20.00 **Dinner**
At the Jury's Inn

Sunday 24 March

- 8.00 Breakfast for those staying at the Jury's Inn
- 9.15 Check-out for those staying at the Jury's Inn
- 9.30 Travel to the Department of Physics & Astronomy
- 10.00 **Workshop** session 3*
Refreshments will be available from 10.45
- 11.30 **Exploring the Solar System with Robots**
Dr Chris Arridge, MSSL/University College London
Lecture theatre 1A7, Pevensey 1 building
- 12.30 Lunch
Creativity Zone, Pevensey 3 building, level 3 (ground floor), room 3C7
- 13.00 Close of conference

Workshop Details

- **Medical physics to music festivals: embedding careers in your teaching**

Dr Taj Bhutta, Institute of Physics

SEPnet Video Conference room, Pevensey 3 building, level 4, room 4C10

Highlighting real world applications of physics and making career opportunities visible in the classroom is important in encouraging under-represented groups, particularly girls, in taking physics post-16. This session will explore interactive ideas for teaching medical physics and resources for embedding careers in to your physics lessons.

- **Teaching practical astronomy**

Dr Robert Smith, University of Sussex

MPS Meeting room, Pevensey 3 building, level 5, room 5C11

A look at a range of practical astronomy experiments, and the equipment required to carry them out. This hands-on session will look at telescopes, binoculars, mounts and various imaging equipment that are available.

- **Electromagnetic Spectrum workshop**

Colin Piper, Physics Network Coordinator

Outreach Lab, Pevensey 2 building, level 5, room 5A21

This workshop will explore imaginative ways of teaching the electromagnetic spectrum, and participants will make their own resources to take away.

- **SEPnet/University of Sussex experiments to go**

Dr Steve Churchwell, University of Sussex

Creativity Zone, Pevensey 3 building, level 3 (ground floor), room 3C7

The University of Sussex is part of SEPnet, the South East Physics Network, a consortium of seven universities all working together to promote physics in the south east. Part of this initiative is an offering of free outreach activities to schools and colleges. This workshop offers the opportunity to see the classroom activities that have been developed by SEPnet and the University of Sussex.

General Information

The Venue

The IOP Spring Physics Update course will take place in Brighton, a coastal city south of London. Most of the lectures and all the workshops will take place in the Pevensey complex of buildings on the University of Sussex campus in Falmer, North-East Brighton. The Friday and Saturday evening lectures will be held in the Jurys Inn hotel where all the residential delegates will be staying. The hotel is situated immediately next to Brighton railway station, beside the station car park.

Department of Physics & Astronomy
University of Sussex
Falmer
Brighton
BN1 9QH

Programme

A programme is attached, and the final programme with any revisions will be handed out on arrival. After the course, details will be placed online at <http://www.sussex.ac.uk/physics/outreach>

Transport & Car Parking

The University of Sussex is well served by rail, with Falmer train station on the edge of campus just 10 minutes walk from the Department of Physics & Astronomy. Trains take just 10 minutes to travel from Brighton station to Falmer station. Brighton station is also well connected, with frequent trains from London taking an hour and passing through Gatwick Airport on the way. Further details can be found in the "Getting to Brighton" section on the following pages.

There are plenty of car parking spaces on the University campus, although finding a space on the Friday may be tricky. We recommend using the Science/P1 car park, as indicated on the Campus Map. Parking in Brighton itself will be difficult on either day, so we recommend leaving your car on campus for the duration of the conference. Campus parking is free on the weekend days, but please collect a free permit upon registration for Friday parking.

Rail tickets between the University of Sussex at Falmer and Brighton will be provided (for both residential and non-residential delegates), although participants must travel in groups of 4 for the tickets to be valid. Further details will be provided at registration.

Accommodation for Residential Delegates

Accommodation during the conference will be at the Jurys Inn beside Brighton railway station (see attached map), just 10 minutes away by rail. Room keys will be handed out at the registration desk at the University of Sussex and rail tickets will be provided as described above. The address of the Jurys Inn is:

Jurys Inn Brighton Hotel,
101 Stroudley Road,
Brighton, BN1 4DJ
Tel: +44 1273 862 121

There is a public car park close to the hotel, but charges apply. For this reason, we recommend cars are left on the university campus during the event.

Registration Desk

On arrival, please go to the registration desk situated in the Creativity Zone which can be found in the Pevensey 3 building, level 3 (ground level), room 3C7. A detailed map of the Pevensey building complex can be found below. Your main points of contact throughout the course are Dr Darren Baskill (0789 4074304) and Dr Mike Hardiman (0776 9911122).

Luggage Storage

Please see registration desk should you require luggage storage on campus.

Meals & Refreshments

Lunch, dinner and mid-morning/mid-afternoon refreshments are provided for both residential and non-residential attendees. Breakfast will be provided at the Jurys Inn for residential attendees only. Please refer to the programme for timings and locations.

Evening Lectures & Meals

The evening lectures and dinners will be held at the Jurys Inn hotel adjacent to Brighton train station, where the residential delegates will be staying. Dinner at the Jurys Inn is included in the price for all, including non-residential. For all attendees, if you have driven we recommend leaving your car in the university car parks and commuting to the to and from the venue by train, due to the lack of parking spaces in town and the convenience of the train.

Name Badges

During registration you will receive a name badge. Please wear this at all times to ensure that staff can identify you as being a participant of the physics update course.

Dress Code

The dress code for the course is casual, but smart casual is suggested for the evenings.

Internet Access

Details of campus internet access, including a temporary username and password, can be obtained on request at the registration desk.

Security/First Aid

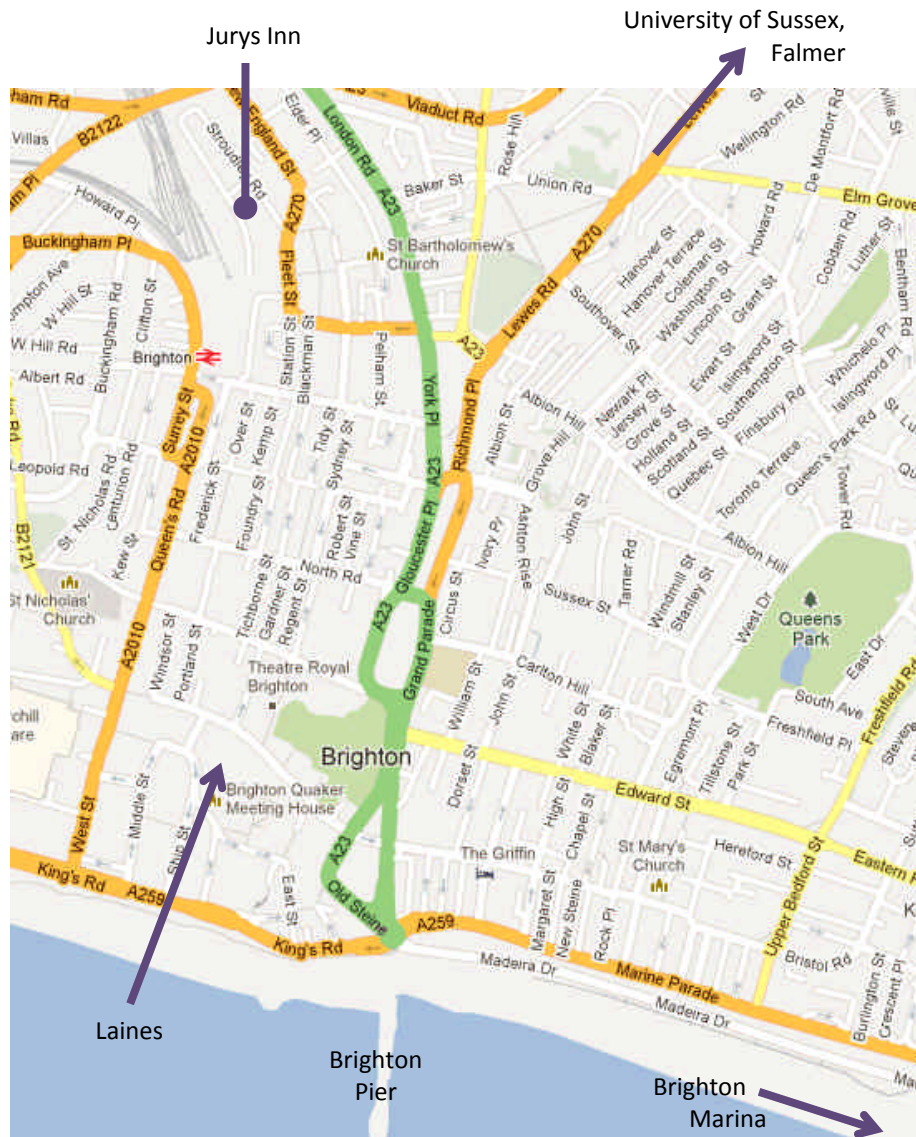
In case of emergency on campus, please call security on **01273 873333** (or **3333** on an internal phone) who can arrange first aid and they will contact the emergency services if required.

Getting to Brighton: Maps



Map of Brighton

The map below of central Brighton is taken from Google Maps.



Getting to Brighton

The University of Sussex campus is well served by public transport with Falmer train station on the south side of campus, and frequent buses on campus to and from Brighton. The adjoining A27 also gives good access by car.

Train

Falmer train station is directly opposite the University campus. Pedestrian access is through a subway under the A27 - follow signs for the University of Sussex (the University of Brighton has a campus at Falmer too). Falmer is on the line between Brighton and Lewes, about ten minutes' travel time in each direction. Four trains an hour go there during the day time. Visitors travelling via London and the west should take a train to Brighton and change there for Falmer. The journey time from London to Brighton is just under an hour. You can also change at Lewes for Falmer, if you are coming from the east.

National Rail Enquiries: <http://www.nationalrail.co.uk>

Coach

National Express Coaches to Brighton depart from London Victoria Coach Station and arrive at Pool Valley in the centre of the city. Services are every hour during the day and take about two hours. Coaches also run to Brighton from Gatwick and Heathrow. From Pool Valley you need to walk 100 metres to the Old Steine where you can catch a bus direct to the University (see Local buses section below), or you can take a taxi.

National Express Coaches: <http://www.nationalexpress.com/coach/>

Taxi

Taxis are available at both Brighton and Lewes train stations and at many places in the centre of Brighton. It is about four miles (six kilometres) from central Brighton to the University. (There is no taxi service at Falmer station itself.) It is quicker and cheaper to catch the train direct to Falmer from Brighton or Lewes.

Car

The University is at Falmer on the A27 between Brighton and Lewes, about four miles (six kilometres) from the centre of Brighton. (Please follow signs for University of Sussex on the north side of the A27; the University of Brighton also has a campus at Falmer on the south side of the A27.) Visitors from London and the north should take the M23/A23 road towards Brighton. Before entering the centre of Brighton, join the A27 eastbound signposted Lewes. Drivers from the east or west take the A27 direct to the University.

Google Maps: <http://maps.google.co.uk/maps?q=falmer>

Parking on campus

During the week, parking on campus is limited and usually with a daily parking charge for visitors (although delegates can collect a free parking permit for the Friday upon registration). The charge

does not apply at weekends, when the car parks are almost empty. Car parks are not attended and so objects of value should not be left in vehicles.

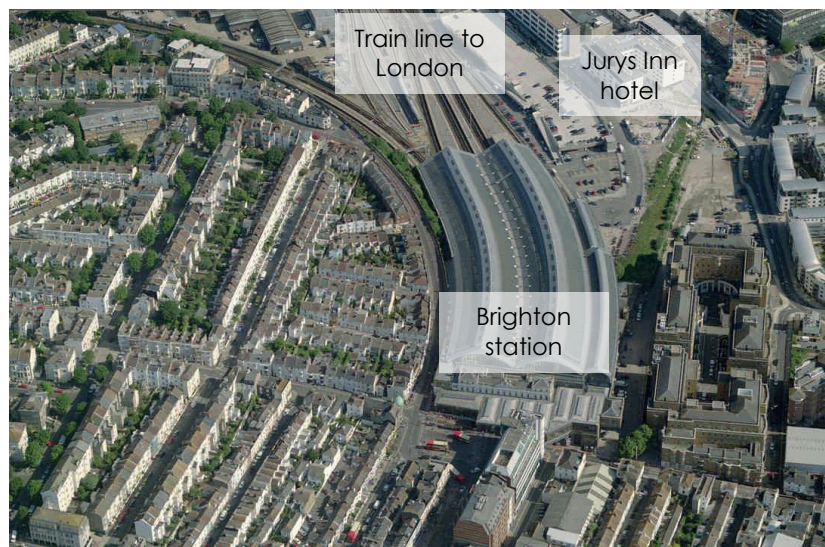
Local buses

The 23, 25, 28 and 29 buses run between the centre of Brighton and the University, bringing you directly to campus. You can catch a bus from the Old Steine in Brighton; the 25 also runs from Churchill Square. The 28 and 29 go from the Old Steine and stop right outside the University campus on their way to Lewes and beyond. Travel time is about 20-30 minutes. Bus timetables and information is available from Brighton buses.

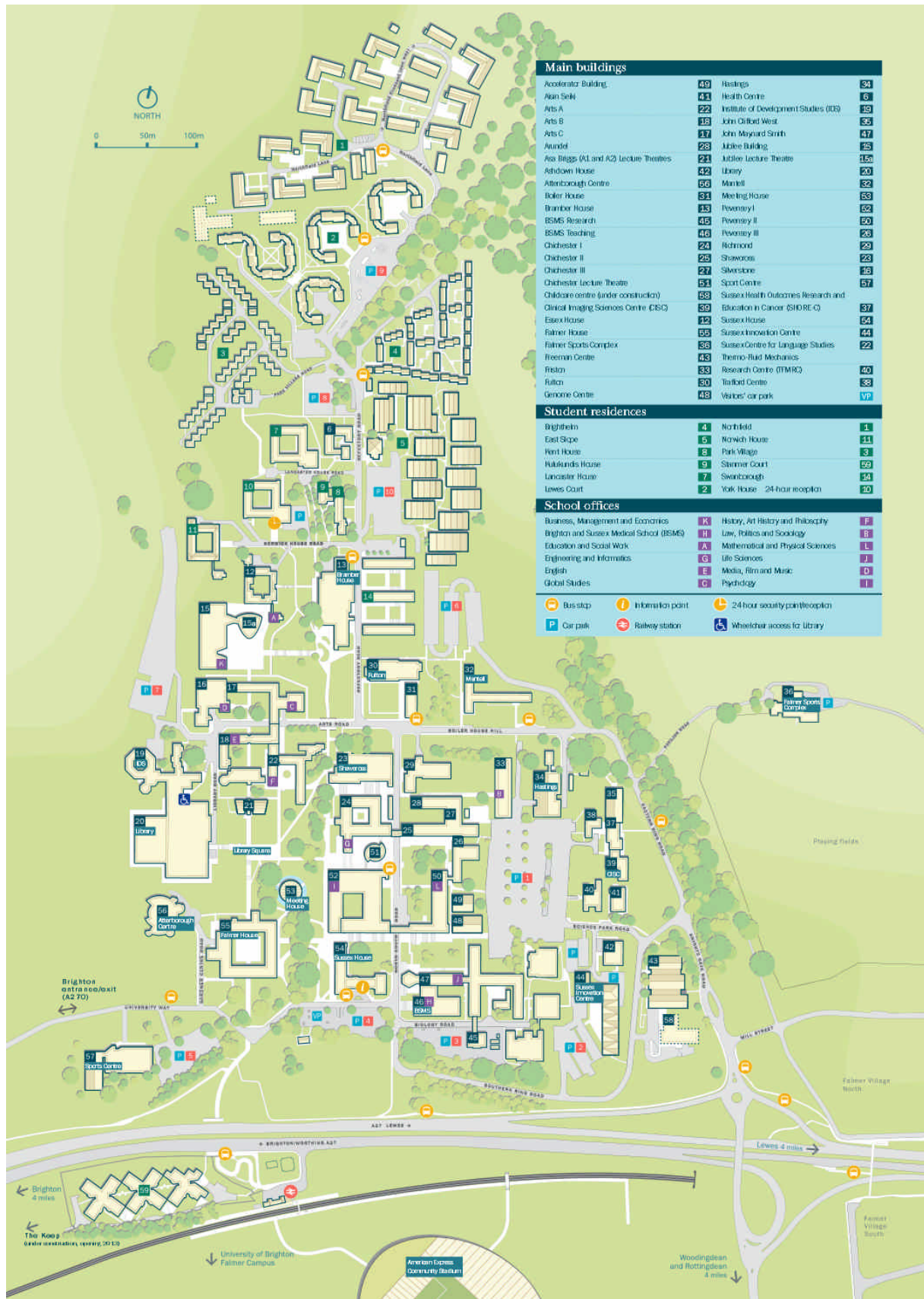
Brighton & Hove Bus company: <http://www.buses.co.uk>

Location of Jurys Inn

The evening lectures, evening meals and residential accommodation will take place at the Jurys Inn, located to the rear of Brighton railway station. The image below is from Bing maps.



Map of Campus



Map of the Pevensey Building Complex

