

Welcome Pack

QuEBS 2023

Quantum Effects in Biological Systems
Workshop 2023

26-30 JUNE 2023

Programme

Monday 26th June

Photosynthesis

0900-0950 Registration and coffee

0950-1000 Introductory talk

1000-1050 **Greg Engel** - Quantum dynamics of photosynthetic light-harvesting: design principles for steering and harvesting energy

1050-1100 Questions

1100-1130 **Richard Cogdell** - Recent advances in understanding the structure and function of the purple photosynthetic bacterial LH2 complex

1130-1140 Questions

1140-1210 **Erik Gauger** - Bio-inspired quantum energy harvesting based on collective light-matter effect

1210-1220 Questions

1220-1230 Discussion

1230-1330 Lunch

1330-1420 **Alexandra Olaya-Castro** - Towards probing quantum processes in single biomolecules on a chip

1420-1430 Questions

1430-1450 Short Talk - Iker Lamas Frejo

1450-1510 Short Talk - Nicolas Werren

1510-1520 Discussion

1520-1540 Coffee break

1540-1600 Short Talk - Charlie Nation

1600-1620 Short Talk - Matteo Bruschi

1620-1630 Discussion

1630-1700 Free time

1700-1730 Poster A lightning talks

1830-2100 Welcome Reception and Poster session A

Programme

Tuesday 27th June

Enzymes

0900-0950	Sharon Hammes-Schiffer - proton-coupled electron transfer in enzymes and photoreceptor proteins
0950-1000	Questions
1000-1030	Louie Slocombe - Quantum Tunelling Effects in the Guanine-Thymine Wobble Misincorporation
1030-1040	Questions
1040-1110	Coffee break
1110-1130	Short Talk - Thorsten Hansen
1130-1150	Short Talk- Catxere Casacio
1150-1210	Short Talk - Max Winokan
1210-1230	Wider discussion
1230-1330	Lunch
1330-1420	Sam Hay - Hydrogen tunnelling and quantised vibrations in enzyme-catalysed reactions
1420-1430	Questions
1440-1500	Coffee break
1500-1600	Free time
1600-1630	Poster B lightning talks
1630-1800	Poster B
1800-1900	Free time
1900-2200	Gala Dinner



Programme

Wednesday 28th June

Cell Signalling

0900-0950 **Clarice Aiello** - From nanotec to living sensors: unravelling the spin physics of biosensing at the nanoscale

0950-1000 Questions

1000-1030 **Nirosha Muraganan** - Reading and writing cellular states using biophysical signals

1030-1040 Questions

1040-1100 Coffee break

1100-1130 **Carlos Martino** - The Quantum Biology of Reactive Oxygen Species Production in Electron Transfer Flavoprotein

1130-1150 Short Talk - Lev Murokh

1150-1210 Short Talk - Alasdair Mackenzie

1210-1230 Wider discussion

1230-1330 Lunch

1330-1430 Free time to get ready for excursion

1430 Excursion

Programme

Thursday 29th June

Enzymes

0900-0950	Jonathan Woodward - Microscopic detection of magnetic field-sensitive radical pair processes in biological systems
0950-1000	Questions
1000-1030	Alex Jones - Essential elements for magnetosensitivity in Drosophila
1030-1040	Questions
1040-1100	Coffee break
1100-1130	Thorsten Ritz - Quantum Sensing with Fast Biological Signal Transduction
1130-1150	Short Talk - Ying Cheng
1150-1210	Short Talk - Vishvendra Singh Poonia
1210-1230	Wider discussion
1230-1330	Lunch
1330-1350	Short Talk - Avi Schnerider
1350-1410	Short Talk - Anna Munro
1410-1430	Short Talk- Lea Gassab
1430-1440	Discussion
1440-1500	Coffee break
1500-1530	Free time
1530-1600	Online talk Wendy Beane with Q&A
1600-1630	Online talk Franco Nori with Q&A
1630-1715	Free time
1700-1800	Drinks reception
1800-1945	Jim Meets Paul Davies Lecture Start



Programme

Friday 30th June

Enzymes

0900-0950	Luca Sapienza - Bio-molecules on a chip: implementing nano-fabrication technology to investigate photosynthetic light harvesters.
0950-1000	Questions
1000-1020	Short Talk - Federico Gallina
1020-1040	Short Talk- Roisin Guthrie
1040-1100	Coffee break
1100-1130	Wider discussion - What is the future of quantum biology?
1130-1200	Wrap-up

How to get to QUEBS

By Car

Parking will be available within the Manor Car Park on the Manor Park Campus which is marked on the attached map (Location 1)

There is a short walk from the car park to the Main Vet School Building (Location 2), please follow the path towards Surrey Sports Park, turn right at the corner and you will see the main building in front of you.

You must register for parking as we have ANPR cameras on our car parks.

[Please click here to register](#)



Click on Image for larger Map

By Public Transport

If you are arriving by public transport into Guildford please see below for local taxi companies, there is also a regular bus service to campus.

guildford is on the main line between London Waterloo and Portsmouth. Half-hourly train services run from Guildford to Waterloo, with journey times of around 40 minutes. For further information, go to the [National Rail](#) website.

Getting to campus from the station

Walking: You can walk from the station to Stag Hill campus within around 10/15 minutes (dependant on where on campus you are headed). Follow Google maps.

Bus: The number 1 and 17 serviced by stagecoach buses runs between the station and the various university locations. The earliest service is at approximately 6am and the last bus is just before midnight. On Sundays there is a reduced service.

Taxi: From main (eastern) exit.
GM Cars – 01483 720720
Five's & 6's Taxis – 01483 565656

Further information can be found here

<http://www.surrey.ac.uk/visit-university/how-get-here>

Accommodation

Your accommodation is on the Manor Park Campus, Block E. Included in your room is the following Amenities: Bed linen, towels, toiletries and tea and coffee are provided. A kettle, iron, ironing board, fridge and microwave can be found in your flat's shared kitchen. Unfortunately, we do not supply hairdryers, adaptors, extra pillows, or blankets.

Please note that not smoking is permitted within the accommodation, designated smoking shelters can be found around campus.

For any issues in your accommodation, please report to the Manor Park reception team during opening hours.

Keys and Personal Belongings

If you lose your key during your stay, please report to Manor Park reception, who will be able to issue a new key. The charge for a replacement key is £10. Please note that reception accepts card payments only.

After the reception's closing, security will only let you into the room and you will need to collect a new key at the next available opportunity. The University accepts no liability for loss or damage to property or vehicles and their contents, nor for injury to visitors to the campus except where required by law. Please lock your bedroom door and shut windows when leaving.

Booked via the online store (Monday 26th – Friday 30th June)

Check in

Please bring your luggage at the time of conference registration. You will be issued with your room key during Lunch on Monday 26th June. Luggage can be stored in a secure locked room until keys are issues

Check out

9am on Friday 30th June

On the final day please bring your luggage with you and we will store in a secure locked room until you are ready to leave the conference on Friday 30th June.

Booked via the online store (Sunday 25th June – Friday 30th June)

Check in

Please arrive at Manor Park reception (Location 3 on map) where they will issue your room key. Reception is open from 10am – 4pm GMT. Should you need any assistance out of opening hours security can be contacted by using the buzzer located outside Manor Park reception or alternatively by calling +44 (0)1483 682002.

Check out

9am on Friday 30th June

On the final day please bring your luggage with you and we will store in a secure locked room until you are ready to leave the conference on Friday 30th June.

Click on Image for larger Map



Social Activities

Welcome Reception Monday 26th June

Location - Lakeside Restaurant (Rik Medlik Building)

Dress Code - Smart Casual

Timings

6.30pm - Welcome speech by Professor Johnjoe McFadden

6.45pm - Canapes served

9pm - Reception concludes

Gala Dinner Tuesday 27th June

Location - Lakeside Restaurant (Rik Medlik Building)

Dress Code - Smart Casual

Timings

7pm - Opening Remarks by Organising Committee

7.30pm - Dinner served

10pm - Gala dinner concludes

How to get to Lakeside Restaurant

Address: Rik Medlik Building, Gu27XH (Location 4 on map)

Walking: Lakeside restaurant is located on the Stag Hill campus which is a 15minute walk from Manor Park campus. If using google maps please use the address above.

By Bus: You can take the number 1 or 17 bus and ask for Austin Pearce Bus stop (5) - this is directly opposite the Rik Medlik building.

By Taxi: UBER is available, alternatively local taxi details are below

GM Cars – 01483 720720

Five's & 6's Taxis – 01483 565656



Social Activities

Brighton i360 Wednesday 28th June

For those who have pre-purchased the workshop excursion to Brighton i360 please find below some additional information.

Meeting point for coach - Manor Park Reception

Dress Code - Smart Casual

Timings

- 2.15pm - Board coach (Surrey Sports Park - Location 6)
- 3.30pm - Arrive in Brighton, free time
- 5.45pm - Meet at Brighton i360
- 6pm - Security check ready for private Pod Flight
- 6:30pm - Private flight in i360 Pod
- 7.15pm - Dinner served
- 10.30pm - Board Coach to return to Surrey

Please take a driving license or Passport as ID

Jim Meets... Paul Davies Thursday 29th June

We are delighted to invite you to attend the Jim meets series with theoretical physicist, cosmologist, astrobiologist and best-selling science author Paul Davies for an 'on the couch' style interview with Professor Jim Al-Khalili. The two will debate on their mutual interest in scientific developments and there will be an opportunity for the audience to get involved and pose questions to both Jim and Paul.

Location - School of Veterinary Medicine (Location 7)

Dress Code - Smart Casual

Timings

- 5pm - Drinks and light nibbles reception (Atrium, Vet School Main building)
- 6pm - Event commences (Lecture Theatre 1, Vet School Main Building)
- 7.30pm - Event concludes

