

## ISRC-CN<sup>3</sup> Autumn School 2022: Collaborate Web Links for Online Attendees

Each lecture, talk or lab has its own, unique web link.

Please join the appropriate web link at the appropriate time as shown below. Please note that the time is **London/Dublin time**. (You may convert the time to the corresponding time at your location e.g. using <a href="https://www.timeanddate.com/worldclock/converter.html">https://www.timeanddate.com/worldclock/converter.html</a>.)

We assume that you have reliable high-speed internet access to attend the live lectures, talks and lab sessions.

If you are unable to join live, recorded video clips will be made available on the ISRC-CN3 GitHub website (https://github.com/ISRC-CN3).

Please contact Dr. Cian O'Donnell (c.odonnell2@ulster.ac.uk) if there is any issue.

# Day 1

### **Lectures & talks**

09:00-09:30

Welcome and opening speech (Liam Maguire, KongFatt Wong-Lin & Damien Coyle)

Click here to join the meeting

09:30-11:00

Introductory neuroscience (Elaine Murray)

Click here to join the meeting

11:15-12:45

Cognitive neural systems and behaviour (Simon Kelly)

Click here to join the meeting

13:00-15:00

Lunch break and social activity

15:00-16:30

Mathematics for neuroscience - An overview (Áine Byrne)

Click here to join the meeting

#### Lab 1

17:00-18:00

https://eu.bbcollab.com/invite/351240b3836f4e2d9dd3d67bead82a60



### Day 2

### **Lectures & talks**

09:30-11:00

Computational modelling of plasticity and learning in brains (Cian O'Donnell)

Click here to join the meeting

11:15-12:45

Ionostasis at the tripartite synapse: Computational modelling of neuronal and glial interactions (Liam McDaid and Marinus Toman)

Click here to join the meeting

12:45-14:15

Lunch and tour of ISRC labs

[no link]

14:15-15:45

Modelling the dynamics of decision-making (KongFatt Wong-Lin)

Click here to join the meeting

16:00-17:00

**TBA** 

### Lab 2

17:30-18:30

https://eu.bbcollab.com/guest/bdc20a5c2407451cac59200c377f84a9

### Day 3

### **Lectures & talks**

09:30-11:00

Investigating time series neural data: Experimental design & signal processing practises (Saugat Bhattacharyya)

Click here to join the meeting

11:15-12:45

Fundamentals of functional and effective connectivity and their applications to mental health conditions (Maria Dauvermann)

Click here to join the meeting

12:45-14:15

Lunch break and campus tour

14:15-15:45

Non-invasive brain-computer interfaces – enhancing applicability using computational intelligence and technological advances (Girijesh Prasad)



### Click here to join the meeting

16:00-17:00

Decoding mental imagery from electroencephalography (EEG) and applications of Al-enabled wearable neurotechnology for communication and rehabilitation (Damien Coyle)

Click here to join the meeting

#### Lab 3

17:30-18:30

https://eu.bbcollab.com/guest/3ab47caf223a4d92ac63c1826fa5f6c1

### Day 4

#### **Lectures & talks**

09:30-10:30

Brain-inspired spiking neural network models for life-long and explainable learning (Nikola Kasabov)

Click here to join the meeting

10:45-11:45

Sparse reservoir computing (Eleni Vasilaki)

Click here to join the meeting

11:45-13:15

Lunch break

13:15-14:45

Building reliable and secure embedded systems with neuromorphic computing (Jim Harkin)

Click here to join the meeting

15:00-16:00

Lifelong Learning AI via neuro-inspired solutions (Hava Siegelmann) [Distinguished External Speaker]

Click here to join the meeting

16:15-17:15

Ethical and regulatory issues in neurotechnology (Arleen Salles)

Click here to join the meeting

### Lab 4

17:30-18:30

https://eu.bbcollab.com/guest/19288bbf4ff04b1d80599b9da26b0fd7

19:30-

Formal dinner and social activity



# Day 5

### Lectures, talks & micro-talks

09:30-12:15
Micro-talks (Attendees)
Click here to join the meeting

12:15-13:45 Lunch break

13:45-14:15

KTPs - Bridging academia and business and supercharging graduate careers (Amanda Fullerton)

Click here to join the meeting

14:15-14:45

Translating Al-enabled neurotechnology research & experience of developing an award winning neurotech startup (Damien Coyle)

Click here to join the meeting

15:00-15:30

Time series analytics of IoT sensor data - An industry challenge perspective (Mark Gorman)

Click here to join the meeting

15:30-15:45

Prize-giving for micro-talk Click here to join the meeting

15:45-16:00

Closing remarks

[same link as prize-giving]