

Al and the Future of Engineering Symposium

Read on for details and timings for the day, and feel free to contact us at <u>Acoustofluidics2024@dysoninstitute.ac.uk</u> if you have any questions. We look forward to welcoming you on Tuesday, 18th June from 8:30 am.

Arrival at Dyson

The address for the event is: The Roundhouse, Dyson Village, Tetbury Hill, Malmesbury, SN16 0FQ. *see on Google Maps*.

Please do not take the main Dyson entrance, take the entrance signed Backbridge Farm (Persimmon Homes), and turn right after approximately 200 metres into the Dyson Village. On arrival, inform the gatehouse that you are attending the AI and the Future of Engineering Symposium in the Roundhouse. You will be checked in and directed to the car park; please find a space in car parks 2 or 3 as shown on the map. Once parked, make your way to the Roundhouse, shown as 4 on the map. It is a big round building, and you won't miss it.



You will be greeted at the registration desk and provided with a visitor badge. Kindly ensure you wear this badge throughout the event. Refreshments will be available upon arrival. Please note that photography is strictly prohibited inside the Dyson campus. We kindly ask that you refrain from taking any photos once you enter the premises.

<u>Agenda For the symposium</u>

08:30 – 09:15: Registration 09:15 – 09:30: Welcome Notes, Prof Beverly Gibbs, Dyson Institute of Engineering and Technology

Morning Session, Chair: Dr James Wilson, Dyson Institute of Engineering and Technology

9:30 - 10:00 AM: Prof Peter Wilson, Dyson Institute of Engineering and Technology Title: Using Computational Intelligence Techniques to Accelerate Design Automation

10:00 - 10:10 AM: Michael Groom, University of Oxford Title: Safety for Mobile Manipulation for Domestic Robots

10:10 - 10:20 AM: Edward Stow, Imperial College London Title: Using Tensor Contractions to Bring Automatic Data Layout Optimisation to Robotics

10:20 - 10:30 AM: Vassil Atanassov, University of Oxford Title: Unsupervised Skill Discovery for Legged Robots

10:30 - 10:45 AM: Break

10:45 - 11:15 AM: Prof Manuch Soleimani, Bath University Title: Application of AI in Engineering and Design: Opportunities in Research and Education

11:15 - 11:45 AM: Prof Shahrokh Shahpar, Rolls-Royce Title: Novel Optimisation to Support Turbomachinery Digital Twin

11:45 - 12:00 AM: Tanzy Kelley and Jake Haworth, Dyson Institute of Engineering and Technology Title: What is the New Format of Engineering Education at Dyson Institute of Engineering and Technology?

12:00 - 1:00 PM: Lunch, Networking, Poster Presentation Sessions, and Demo of "VR-aided Engineering Design"

We will ensure all requested dietary requirements are catered for. If there's anything else you'd like to make us aware of, please email events@dysoninstitute.ac.uk before Friday 14th June.

Afternoon Session, Chair: Dr Mehdi Biroun, Dyson Institute of Engineering and Technology

1:00 - 1:30 PM: Dr Michael Mangan, University of Sheffield Title: Reverse Engineering Insect Brains to Provide the Software Mind Enabling Machines to Move Like Natural Creatures

1:30 - 2:00 PM: Prof Sabine Hauert, University of Bristol Title: Swarms for Everyday Environments

2:00 - 2:15 PM: Break

2:15 - 2:45 PM: Prof Damien Coyle, Bath University Title: Neurotechnology, Brain-Computer Interfaces and Human Augmentation Technologies

2:45 - 3:15 PM: Stephen James, Dyson Title: Robot Learning for Advanced Domestic Robotics

3:15 - 3:45 PM: Prof Andrew Davison, Imperial College London Title: From SLAM to Spatial AI

3:45 – 4:15 PM: Moe Sanni & Antony Waldock, Dyson Title: Robotics in Dyson

4:15 - 4:30 PM: Closing Remarks

Departure

The event is expected to conclude around 4:30 PM, you will be escorted back to the car park. If you are using a local taxi service, you'll need to quote the collection address as Dyson Village, Tetbury Rd, Malmesbury SN16 0FQ and wait for your taxi by the Dyson Village car park entrance.

Hotels

There are several hotels locally should you need to stay overnight.

Malmesbury

- The Old Bell Hotel, Malmesbury
- The Kings Arms, Malmesbury

Tetbury

- The Close Hotel, Tetbury
- <u>The Ormond, Tetbury</u>
- <u>The Hare & Hounds Hotel, Tetbury</u>
- <u>The Snooty Fox, Tetbury</u>

Assistance

If you need guidance or advice before or during the event, please ask a member of staff or call one of the team:

Lucy Trowse - 07899 063079 Jessica Walton - 07709 839172 Dyson Security - 01666 828045 (in an emergency)

Event Broadcasting

Disclaimer for Acoustofluidics SIG 2024 Attendees and Speakers

Please be advised that the Acoustofluidics SIG 2024 event will be recorded and broadcasted online via the Dyson Institute's YouTube channel. Additionally, the video will be shared publicly after the event.

By attending or participating in this event, you consent to being recorded and your image, voice, and/or presentation being included in the broadcast and any subsequent distribution of the recording. If you have any concerns or objections regarding this, please contact events@dysoninstitute.ac.uk prior to the event.

We look forward to seeing you next week!