TALKS

1. Microplastic solutions
   18.45–19.45

2. A new Higgs – what will the Large Hadron Collider find next?
   20.00–20.45

3. Sticky insects under the microscope
   Talks will run 18.20–18.50, 19.15–19.45 and 20.10–20.40

4. Tiny talks
   - 18.50–19.15: Artistic beauty at the smallest scales (Marianna Soukeras and Sandrine Heutz)
   - 19.30–19.55: Lighting up cancer with nanoparticles (Faysal Farah)
   - 20.10–20.35: Cool atoms searching for gravity waves (Elizabeth Pasatembou)

WORKSHOPS

5. Space-bending bauble workshop

6. Atom>Light>Dance
   Workshops start at 18.30, 19.15 and 20.00

EXHIBITS

8. Printing tomorrow’s batteries from the bottom up

9. Money saving microscopy

10. Design your own nano body probes

11. Mini magnets for cleaner computing

12. Nano waves

13. The magic of molecular chirality

14. Killing cancer with nano light sabres

15. Get to know your red blood cells

16. Nano light shows

17. Ion smashing game

KEY

1. Lates listing
2. Information point
3. Bar
4. Stairs
5. Lift
6. Water fountain
7. Toilets
8. Baby changing facility
9. DJ
10. Food
11. Microplastic print studio
12. Printing tomorrow’s batteries from the bottom up
13. Money saving microscopy
14. Design your own nano body probes
15. Nano waves
16. The magic of molecular chirality
17. Killing cancer with nano light sabres
18. Get to know your red blood cells
19. Nano light shows
20. Ion smashing game
### TALKS

| 1 | Microplastic solutions | Various | 18.45–19.45 | From stricter regulations and recyclable bio-alternatives, to demonstrating human health risks, our expert panel discuss ways to keep microplastics out of our environment and lungs. |
| 2 | A new Higgs – what will the Large Hadron Collider find next? | Mitesh Patel, Department of Physics | 20.00–20.45 | Learn how the decay of tiny particles produced at CERN could confirm a fifth fundamental force of nature. |
| 3 | Sticky insects under the microscope | Andrea Attipoe, Department of Bioengineering | Talks will run 18.20–18.50, 19.15–19.45 and 20.10–20.40 | Explore the micro-scale science of how stick insects clamber up walls, and how this could inspire tomorrow’s medical plasters and wall-climbing robots. |
| 4 | Tiny talks | | Short presentations from those exploring the very small. |

| 5 | Space-bending bauble workshop | Jo Sheffield and Imperial’s Atom Interferometer Observatory and Network | Create your own cosmologically festive ornaments inspired by the detection of gravity waves with super cold atoms. |
| 6 | Atom>Light>Dance | Please reserve your place | | Workshops start at 18.30, 19.15 and 20.00 | Discover how atoms absorb and emit light to colour our world. Don a pair of headphones and join a dance lesson inspired by atomic spectra and the parallels between light and sound waves. |
| 7 | Microplastic print studio | Katie Kennedy and Imperial’s MRC Centre for Environment and Health | Contribute to a giant printed artwork aiming to raise awareness of the health risks of microplastics as an air pollutant. |

### EXHIBITS

| 8 | Printing tomorrow’s batteries from the bottom up | Cecilia Mattevi, Department of Materials | Meet the researchers whose microstructure experiments are helping 3D print the batteries of the future. |
| 9 | Money saving microscopy | Photons Group | Check out a new type of fluorescent microscope that could achieve high resolution cancer tissue imaging at a fraction of the cost. |
| 10 | Design your own nano body probes | Faysal Farah, Medical Imaging CDT | Create body tracing nanoparticles and test their ability to probe inside our bodies with researchers working to enhance MRI scanners. |
| 11 | Mini magnets for cleaner computing | Kilian Stenning, Department of Physics | See how nanoscale magnets could make computing greener and artificial intelligence more environmentally friendly. |
| 12 | Nano waves | Marianna Soukeras | Enjoy a specially commissioned piece of art inspired by the techniques and chemical dyes used by scientists studying the spin of tiny molecules. |
| 13 | The magic of molecular chirality | London Centre for Nanotechnology and Department of Chemistry | Discover how molecular "handedness" could be useful in creating state-of-the-art smart phone and television displays. |
| 14 | Killing cancer with nano light sabres | Laki Pantazis, Department of Bioengineering | Find out how biodegradable nanoprobes could illuminate and eliminate cancerous targets in our body. |
| 15 | Get to know your red blood cells | Invisible Warrior project | Dive into the red and discover how the red blood cell shape is changed in sickle cell disease. |
| 16 | Nano light shows | London Centre for Nanotechnology and Department of Physics | Enjoy a series of glass art works created by nanoscientists working in the fields of optics with tiny lasers. |
| 17 | Ion smashing game | Department of Materials | Roll up for a fairground game of subatomic crashes with scientists who use these smashing techniques to change materials at the molecular level. |