

Superconductivity CDT Partners

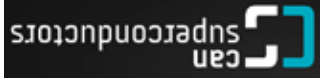


Engineering and
Physical Sciences
Research Council

ISIS Neutron and
Muon Source



HFML-FELIX



<https://superconductivity-cdt.ac.uk/>



SUPERCONDUCTIVITY CDT - LAUNCH EVENT

Martin Wood Lecture Theatre
Clarendon Laboratory
OXFORD PHYSICS
18 September 2024



<https://oxfordsuperconductivity.web.ox.ac.uk>

TALKS



09.30 - 10.00 Coffee and registration and posters displayed

A. INTRODUCTION TO THE SUPERCONDUCTIVITY CDT (CHAIR: AMALIA COLDEA)

10:00-10:45 **Antony Carrington**, University of Bristol
Introduction to the Superconductivity CDT

10:45-11:00 **Questions and Answers - CDT Panel**

B. RESEARCH ACTIVITIES OF THE CDT COMMUNITY (CHAIR: MALTE GROCHE)

11:00-11:30 **Nigel Hussey**, University of Bristol
Fundamental Research on Superconductivity

11:30-12:00 **Susie Speller** University of Oxford
Superconducting Materials

12:00-12:30 **John Durell**, University of Cambridge
Superconducting Engineering and Applications

12:30-14:30 Lunch / Posters / Group Photo

C. PARTNER ENGAGEMENT WITH THE CDT (CHAIR: STEPHEN HAYDEN)

14:30-15:00 **Russell Ewings (STFC,RAL,ISIS) - large scale facilities**
Superconductivity research using neutrons and muons

15:00-15:30 **Greg Brittles (Tokamak Energy) - fusion**
Tokamak Energy's research objectives for Superconductivity CDT

15:30-16:00 **Stuart Wimbush (UK Atomic Energy Authority) - fusion**
Superconductivity for STEP

16:00-16:30 **Ben Bryant, Oxford Instruments - industry**
Superconductivity by researchers, for researchers

16:30-16:50 **M'hamed Lakrimi (Siemens Healthineers Magnet Technology) - industry**
Superconductivity for MRI magnets

16:50-17:00 **Questions and Answers session - Partners**

17:00-18:00 Drinks Reception / Posters
Event sponsored by Oxford Instruments



18:00 Closing down of the meeting – Collection of posters

POSTERS

Department of Physics



D. POSTERS (9:30-18:00)

1. **Sian Tedaldi**, University of Oxford
Graduate training in public engagement
2. **Siddharth Saxena**, University of Cambridge
Emergent Quantum Phases and Multicriticality
3. **Simon Hall**, University of Bristol
Morphological control and doping of High-Tc superconductors
4. **Christopher Bell**, University of Bristol
Heavy element thin films, devices and microstructured materials
5. **William Iliffe**, UK Atomic Energy Agency (UKAEA)
STEP's plan for understanding REBCO coated conductors in the Fusion Environment
6. **Shuqiu Wang**, University of Bristol
Atomic-scale visualisation and identification of electronic structures in spin-triplet superconductors at mKs
7. **Jun Ma**, University of Bristol
R&D towards industrial applications based on HTS REBCO coated conductors
8. **Felix Flicker**, University of Bristol
Lifshitz transition enabling superconducting dome around a charge-order critical point
9. **Qi Wang**, University of Cambridge
Magnetisation and demagnetisation of trapped field stacks in a superconducting machine for electric aircraft
10. **Sven Friedemann**, University of Bristol
Transport, and Structural Studies of High-Pressure superconductor La₃Ni₂O₇
11. **Mustafa Bakr**, University of Oxford
Characterisation of a 16-Qubit Superconducting Device with Nearest- Neighbour Coupling
12. **Clara Barker**, University of Oxford
Superconducting thin-films for quantum devices with off-line quality assessment
13. **Stephen Hayden**, University of Bristol
Spin fluctuation in cuprate superconductors
14. **Amalia Coldea**, University of Oxford
Iron-based superconductors. A versatile Superconducting Platform
15. **Amalia Coldea**, University of Oxford
Oxford Centre for Applied Superconductivity. Experimental Capabilities in Oxford Physics