



# Icy Durham Practical Course

Wed 7<sup>th</sup> Jan – Fri 9<sup>th</sup> Jan 2026

**(Registration: 09.00 Wed 7<sup>th</sup> Jan 2026 - Sir James Knott Library, Rm.132, Phys. Dept. Durham U.).**

<https://superconductivitydurham.webspace.durham.ac.uk/cdt-workshop-critical-current-measurements-on-high-temperature-superconducting-tapes/>

## Wednesday 7<sup>th</sup> January - Day 1: Core HTS skills and knowledge

8.45	9.10	Registration. Welcome/On-line lecture consent.	Registration + Coffee: <u>SJK Library in Physics Dept.</u>
9.10	9.45	<b>Lecture: Safety talk</b> (M. Raine)	SJK Library
9.45	11.15	<b>Lecture: Superconductivity for Fusion</b> (D. Hampshire: 55 min Lect. + 25 mins conv.)	SJK Library
11.15	11.45	<b>RISK Consent + Menu Choices + Coffee</b>	
11.45	13.00	<b>Lab: Solder up HTS samples</b>	Labs 42(ED1), 44(ED2), 72 (ED3) + 48(CD1) + MJR
13.00	14.00	<b>Lunch (Palatine Centre)</b>	
2.00	3.30	<b>Lecture: Cryogenics</b> (C. Monroe: 55 min Lect.+ 25 min conv.)	SJK Library
3.30	3.45	<b>Coffee</b>	
3.30	5.00	<b>Labs: Soldering HTS + <math>I_c</math> (critical current) measurements (1).</b>	Labs 42(ED1), 44(ED2), and 72 (ED3)

## Thursday 8<sup>th</sup> January - Day 2: $I_c$ measurements and magnets

9.00	10.30	<b>Lecture: Computational magnet design</b> (A. Blair: 55 min Lect. + 25 min conv.)	SJK Library/Coffee
10.30	11.00	<b>Coffee break</b>	
11.00	13.30	<b><math>I_c</math> measurements (Surnames A-K) or Computational workshop (L-Z) - (A.Blair)</b>	Labs 42(ED1), 44(ED2), and 72 (ED3) + SJK Library(CD1 + CD2)/Coffee
13.30	14.30	<b>Lunch (Palatine Centre)</b>	
14.30	17.00	<b><math>I_c</math> measurements (Surnames L-Z) or Computational workshop (A-K) - (A.Blair)</b>	Labs 42(ED1), 44(ED2), and 72 (ED3) + SJK Library(CD1 + CD2)/Coffee

18.30 – 19.30: Durham Cathedral tour. 20.00: Bistro Italiano, 70 Claypath DH11QT. > 21.30: ill-defined thereafter...

## Friday 9<sup>th</sup> January - Day 3: Fusion cables and magnet engineering

09.00	09.10	<b>Choices</b>	SJK Library/Coffee
9.10	10.50	<b><math>I_c</math> lab surgery or Poster/analysis activity support.</b>	Labs 42(ED1), 44(ED2), and 72 (ED3)+ SJK Library(CD1 + CD2)/Coffee
10.50	11.00	<b>Informal data review</b> (2 Students + Exp. Demonstrators)	SJK Library
11.00	11.30	<b>Coffee break</b>	
11.30	13.00	<b>Lecture: Cables and fusion magnets</b> (S. Wimbush: 55 min Lect. + 25 min conv.)	SJK Library
13.00	14.00	<b>Lunch (Palatine Centre) + Journey home</b>	