

|                 | Day   | Day                     | Start                                  | End  | Lecture Topics  | Speaker                                | Session Chair            |
|-----------------|-------|-------------------------|--|--|---|--|--------------------------|
| Advanced Course | Day 1 | Tues<br>18th July       | 10:45                                  | 11:30  | REGISTRATION  |  |                          |
|                 |       |                         | 11:30                                  | 11:50  | Welcome and course introduction   | Ziad Melhem (Oxford Quantum Solutions) | Chris Lawson (STFC)      |
|                 |       |                         | 11:50                                  | 12:40  | Cooling a cryostat  | Matt Hills (STFC)                      |                          |
|                 |       |                         | 12:40                                  | 13:40  | LUNCH   |  |                          |
|                 |       |                         | 13:40                                  | 14:30  | Multi-layer insulation  | Edward Jones (STFC)                    | Matt Hills (STFC)        |
|                 |       |                         | 14:30                                  | 15:20  | Software  | Niklas Templeton (STFC)                |                          |
|                 |       |                         | 15:20                                  | 15:40  | COFFEE  |  |                          |
|                 |       |                         | 15:40                                  | 16:05  | Thermometry 1   | Lev Levitin (RHUL)                     | Matt Hills (STFC)        |
|                 |       |                         | 16:05                                  | 16:55  | Thermometry 2   | Alex Jones (STFC)                      |                          |
|                 |       |                         | 16:55                                  | 17:20  | Thermometry 3   | Lev Levitin (RHUL)                     |                          |
|                 |       |                         | CONFERENCE DINNER                      |  |   |  |                          |
|                 | Day 2 | Weds<br>19th July       | 9:00                                   | 9:50   | High Voltage Engineering at Low Temperatures                                | Roland Piccin (CERN)                   | Chris Lawson (STFC)      |
|                 |       |                         | 9:50                                   | 10:40  | Pipelines, bayonets, couplings, and valves                                  | David Cooke (Thames Cryogenics)        |                          |
|                 |       |                         | 10:40                                  | 11:00  | COFFEE  |  |                          |
|                 |       |                         | 11:00                                  | 11:50  | Industrial cryogenics   | Jon Trembley (Air Products)            | Richard Down (STFC)      |
|                 |       |                         | 11:50                                  | 12:40  | Helium production, liquefaction, and storage                                | Pascale Dauguet (Air Liquide)          |                          |
|                 |       |                         | 12:40                                  | 13:40  | LUNCH   |  |                          |
|                 |       |                         | 13:40                                  | 14:30  | Cryogenics for astronomy  | Anna Orłowska (STFC)                   | Andy Blackett-May (STFC) |
|                 |       |                         | 14:30                                  | 14:50  | COFFEE  |  |                          |
|                 | 14:50 | 17:20                   | Hydrogen 1                             | Christoph Haberstroh (TU Dresden)            | Andy Blackett-May (STFC)  |  |                          |
|                 | Day 3 | Thurs<br>20th July      | 9:00                                   | 9:50   | Cryogenics at large scale research facilities 1: beam applications          | Oleg Kirichek (STFC)                   | Andy Blackett-May (STFC) |
|                 |       |                         | 9:50                                   | 10:40  | Cryogenics at large scale research facilities 2: SRF, accelerators, magnets | Shrikant Pattalwar (STFC)              |                          |
|                 |       |                         | 10:40                                  | 11:00  | COFFEE  |  |                          |
|                 |       |                         | 11:00                                  | 11:50  | Cryogenics at large scale research facilities 3: fusion                     | Nanna Heiberg (CCFE)                   | Andy Blackett-May (STFC) |
|                 |       |                         | 11:50                                  | 12:40  | Hydrogen 2  | Hamish Nichol (Ricardo)                |                          |
|                 |       |                         | 12:40                                  | 13:40  | LUNCH   |  |                          |
|                 |       |                         | 13:40                                  | 14:30  | Cryogenics for quantum technology and physical sciences                     | Ziad Melhem (Oxford Quantum Solutions) | Matt Hills (STFC)        |
| 14:30           |       |                         | 14:50                                  | COFFEE                                       |   |  |                          |
| 14:50           |       |                         | 15:40                                  | Cooling below 1 K and running a ULT facility | Viktor Tseplin (Lancaster)  | Oleg Kirichek (STFC)                   |                          |
| 15:40           | 16:00 | Summary and conclusions | Ziad Melhem (Oxford Quantum Solutions) |  |   |  |                          |