

Applied Cryogenics

Teacher: Riccardo Musenich (INFN Genova)

- 1. Properties of matter at low temperature
- 2. Low temperature thermometry and thermostat control
- 3. Cryogenic fluids and superfluid helium
- 4. Heat transmission mechanisms and techniques for reducing thermal input
- 5. Dewar, cryostats and transfer lines
- 6. Current adductors
- 7. Refrigeration and liquefaction cycles and real chillers
- 8. Practical examples: helium transfer, cooling of a superconducting magnet
- 9. Safety notes cryogenics and laboratory visit (liquefactor, helium recovery and distribution system)