

Pre-conference Short Courses on 26th Nov'2024

The pre-conference short courses on Applied Superconductivity and Cryogenic Instrumentation have been organized on 26th Nov'2024 at IUAC. All are invited to attend the courses. You can register your participation in the sort courses during the online registration.

| Topics | Speaker | Duration | Time |
|---|---|----------|--------------|
| Applied Superconductivity (Ph.D Class room) Talk duration= 75min+ 15 min(Q&A) | | | |
| Basics of Superconductivity and Superconducting Magnets/ Detector | Dr. Probir Ghosal Jefferson Lab, USA | 90 min | 09:30- 11:00 |
| Tea Break | | | 11:00-11:30 |
| Basics of Superconducting Cavities | Dr. Vinit Kumar RRCAT, Indore | 90 min | 11:30-13:00 |
| Lunch Break | | | 13:00-14:00 |
| Basics of Fabrication of the Superconducting cavities | Dr. Avinash Puntambekar , RRCAT, Indore | 90 min | 14:00-15:30 |
| Teak break | | | 15:30 |

| Topics | Speaker/ demonstrator | Duration | Time |
|---|--|----------|--------------|
| Cryogenic Instrumentation (Seminar room) | | | |
| Hands-on training on the cryogenic instrumentation Session-1 | Dr. Joby Antony Mr. Rajesh Nirdoshi | 90 min | 9:30 –11:00 |
| Tea Break | | | 11:00-11:30 |
| Hands-on training on the cryogenic instrumentation Session-2 | Dr. Joby Antony Mr.Rajesh Nirdoshi | 90min | 11:30–13:00 |
| Lunch Break | | | 13:00-14:00 |
| Hands-on training on the cryogenic instrumentation Session-3 | Dr. Joby Antony Mr.Rajesh Nirdoshi | 90min | 14:00 –15:30 |
| Lunch Break | | | 15:30 |
| Details of the course structure | | | |
| ❖ Quick Overview of Indigenous Cryogenic Instrumentation for LINAC (Remote control units, various hardware, firmware & software) | | | |
| ❖ Design details of indigenous 8 channel temperature monitors. (RS232 communication -Hardware, Firmware & Software) | | | |
| ❖ Design details of Indigenous LHe/LN2 level meters/servers (Ethernet communication– Hardware, Firmware & Software) | | | |
| ❖ Design details of IUAC Control output servers (Ethernet - RS232 – Hardware, Firmware & Software) | | | |
| ❖ Design details of embedded servers and IoT design, ML in future Cryogenic Instrumentation | | | |
| ❖ Design details of Labview software for interfacing/automation / data Acquisition with IUAC devices with 32 bit micro controller based designs | | | |