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			
Talk duration= 60min+ 15 min(Q&A]			
Basics of Superconductivity and Superconducting Magnets/ Detector	Dr. Probir Ghoshal Jefferson Lab, USA	75 min	09:30- 10:45
Tea Break			10:45-11:15
Basics of Superconducting MRI magnet	Dr. Lionel Quettier GANIL, USA	75 min	11:15- 12:30
Lunch Break			12:45-13:45
Basics of Superconducting Cavities	Dr. Vinit Kumar RRCAT, Indore	75 min	13:45-15:00
Basics of Fabrication of the Superconducting cavities	Dr. Avinash Puntambekar , RRCAT, Indore	75 min	15:00-16:15
Tea Break			16:15

Topics	Speaker/ demonstrator	Duration	Time
Cryogenic Instrumentation			
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
Tea 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