

Empowering Science: The Vital Role of OPTEC at the University of Oxford



Speaker: Dr. Rui Gao (高睿 Univ. Oxford)
Time: 14:00 Fri 20th Oct 2023
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Abstract:

The department of Physics at University of Oxford is one of the most premier physics departments in the world. At Oxford, we apply the transformative power of physics to the foremost scientific problems; educate the next generation of leading physicists; and promote the public understanding of physics.

To support these exceptional endeavours, the Oxford Physics Technical Excellence Centre (OPTEC) provides specialised equipment, facilities, and expertise that set us apart. Our workshops and facilities house state-of-the-art equipment managed by engineers, technicians, and physicists with world-leading expertise. They deliver customised solutions to the department and the wider community.

This presentation will provide insights into OPTEC, including its organisational structure, technical capabilities, expertise repository, and, most importantly, how we enable the community to advance their physics research.

About the speaker:

Dr. Rui Gao received his Bachelor's Degree in Engineering from Harbin Institute of Technology in 2000 and completed his PhD in Electronics Engineering at the University of Teesside, UK, in 2004. He subsequently worked as a Postdoctoral researcher at the University of York, focusing on hardware realisation of Embedded Operating Systems and hardware-based Java interpreters. In 2007, Rui transitioned to particle physics research as a Senior Electronics Engineer in the Electronics Group (now part of OPTEC) at the University of Oxford's Department of Physics. His work involved electronics design, firmware, software development, testing, and commissioning. He contributed to projects such as the RICH detector maintenance, LHCb upgrade I RICH firmware development and testing, and currently works for LHCb upgrade II, including TORCH detector R&D and VELO upgrade.