April 3–5, 2024 > Imperial College – London

Terrestrial Very-Long-Baseline Atom Interferometry

2nd WORKSHOP

The primary objectives of the workshop are to discuss the technology and physics drivers for large-scale Atom Interferometry as well as to establish the foundation for an international TVLBAI proto-collaboration. This protocollaborative effort aims to bring together researchers from diverse institutions, fostering strategic discussions and securing funding for terrestrial large-scale Atom Interferometer projects. The goal is to develop a comprehensive roadmap outlining design choices, technological considerations, and science drivers for one or more kilometer-scale detectors, expected to become operational in the mid-2030s.

Organisers:

INTERNATIONAL ORGANISATION COMMITTEE

Gianluigi Arduini, CERN, Geneva, Switzerland Kai Bongs, DLR Institute for Quantum Technologies, Germany Philippe Bouyer, University of Amsterdam, Netherlands Oliver Buchmueller, Imperial College London, UK Sergio Calatroni, CERN, Geneva, Switzerland Benjamin Canuel, CNRS, Institut d'Optique, France Marilù Chiofalo, University of Pisa and INFN Pisa, Italy Michael Doser, CERN, Geneva, Switzerland John Ellis, King's College London, UK Naceur Gaaloul, Leibniz Universität Hannover, Germany Jason Hogan, Stanford University, US Peter Knight, Imperial College London, UK Timothy Kovachy, Northwestern University, US Ernst Rasel, Leibniz Universität Hannover, Germany Ian Shipsey, Oxford University, UK Guglielmo Tino, Università di Firenze and LENS, Italy



Imperial College London

Wolf von Klitzing, IESL-FORTH, Greece Mingsheng Zhan, Wuhan Institute of Physics and Mathematics, China

LOCAL ORGANISATION COMMITTEE

Charles Baynham, Imperial College London, UK Oliver Buchmueller, Imperial College London, UK John Ellis, King's College London, UK Richard Hobson, Imperial College London, UK Adam Lowe, Oxford University, UK Christopher McCabe, King's College London Sean Paling, Boulby Underground Laboratory, UK Ulrich Schneider, Cambridge University, UK Dennis Schlippert, Leibniz University Hannover, Germany Maurits van der Grinten, Rutherford Appleton Laboratory, UK

INFORMATION https://indico.cern.ch/event/1369392/