Towards a new generation of high-performance operational quantum sensors

By
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Sale manager of Muquans

Date 3 November 2015, Tuesday
Time: 4pm – 5pm
Venue: Hilbert Space (PAP-02-02)
Host: Assoc Prof David Wilkowski

Abstract

After 30 years of academic research in cold atom sciences, intensive developments are being conducted to improve the compactness and the reliability of experimental set-ups in order to transfer such devices from laboratory-based research to an operational utilization. This seminar will be dedicated to the presentation of the Absolute Quantum Gravimeter and the atomic clock that are being developed by Muquans. We will present in detail the principles of operation and the main features of our instruments. Their performances in terms of sensitivity, stability and accuracy and the latest results they achieved will be reviewed. We will then discuss their use to support other research activities (Geodynamics and hydrology, geodesy).

Short Biography

Jean Lautier-Gaud is the sale manager of Muquans. Muquans is a French SME specialized in high-precision measurements based on laser-cooled atoms. Muquans is a spin-off from Institut d’Optique (LP2N) and Observatoire de Paris (LNE-SYRTE), where the core of our products has been developed for more than 15 years. After 4 years of activity, Muquans has built a highly-experienced team of 20 scientists and engineers gathering a deep expertise in various technological domains.