



Applications of Atomic Physics and Atomic Interferometry

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Message from the Guest Editor

Dear Colleagues,

Strong efforts are currently being made to transfer quantum technology into industry, in a context of strong international financial support. Among these technologies, cold atoms sensors already have a significant maturity, allowing us to envision applications in the short term. Atomic clocks, cold atom gravimeters and gyroscopes have demonstrated sensitivity and long-term stability, paving the way to a technological breakthrough for inertial sensors. Despite the initial high complexity of the first experiments, the effort of development during the past 15 years has completely changed this paradigm. Commercial atom gravimeters are now available, with performances comparable to the state of the art. The challenge today is to expand this technology, which is about to emerge in the following topics: onboard terrestrial gravimetry, gradiometry, navigation, magnetometry, and spatial geodesy, among others.

This Special Issue aims to highlight the strong dynamism to transfer atom interferometry into the industrial world, and the important interaction between the cold atom community and the potential users.





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Message from the Editor-in-Chief

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