

## QUANTUM MEASUREMENTS IN THE NEGATIVE MASS REFERENCE FRAME

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According to Quantum Mechanics a measurement of the position of an object imposes a random quantum perturbation on its momentum. This randomness leads to the well known Heisenberg uncertainty on the measurement of motion. Ideas and experiments where motion can be tracked beyond those limitations with, in principle, unbound sensitivity will be presented. Applications for sensing of forces, fields and gravitaional waves will be discussed.

FRIDAY,  
27.04.2018

2:00 PM

CFEL  
SEMINAR ROOMS I-III

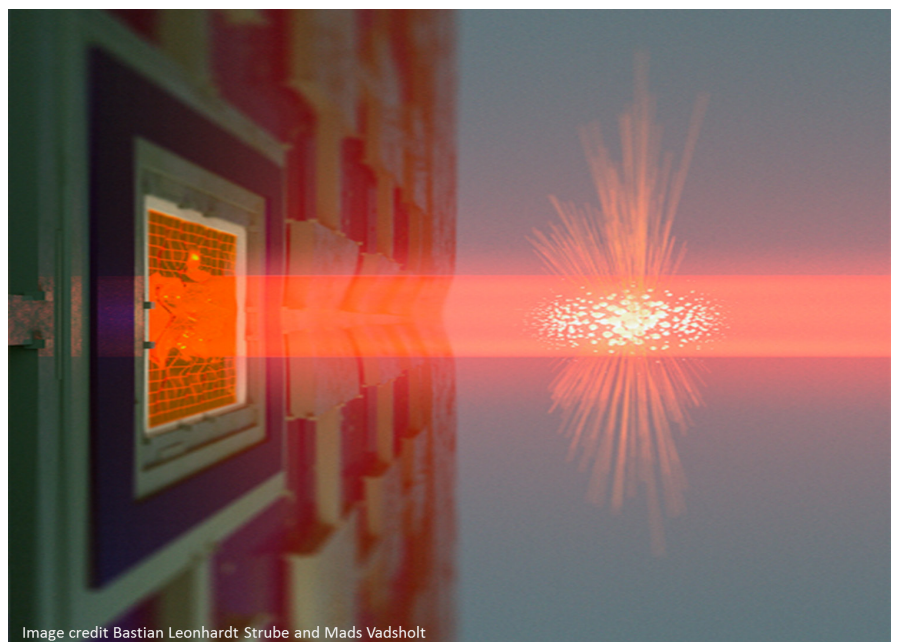


Image credit Bastian Leonhardt Strube and Mads Vadsholt