WE-HERAEUS-SYMPOSIUM

Measurements at the Limit

7 November 2019

Physikalisch-Technische Bundesanstalt
Institut Berlin | Start: 9:00 am

FUNDAMENTAL CONSTANTS | GRAVITATIONAL WAVES
MASS MEASUREMENTS | ULTRACOLD ATOMS
ULTRAFAST PHYSICS | LHC PHYSICS

Registration deadline: 27 September
https://www.we-heraeus-stiftung.de/
measurements-at-the-limit

WILHELM UND ELSE HERAEUS-STIFTUNG
Measurements at the Limit

A few months have passed since the fundamental revision of the International System of Units, the SI, that is based on fixing the numerical values of “defining constants” such as, for example, the Planck constant, the elementary electric charge, or the Boltzmann constant. The determination of these constants as well as testing the underlying physical laws in extremely precise experiments will be the focus of the symposium. We aim to review recent achievements in high-accuracy measurements of energy, mass, time and length. The various applications of these measurements will be discussed in detail. Moreover, special attention will be paid to the quantum nature of such measurements as well as to their physical limitations.