



CRC 1227
Designed Quantum States of Matter



GUEST LECTURE

Prof. Marianna Safronova

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(Guest of Dr. André Kulosa)

Physikalisch Technische
Bundesanstalt Bundesallee 100,
38116 Braunschweig
RZB, Room 11
13 December, 2018, 3:30 pm

"Probing new physics with atomic clocks"

An extraordinary progress in quantum control and laser technologies led to the development of atomic clocks that will not lose a second in over 10 billion years. Exceptional precision of these clocks enabled searches for the variation of fundamental constants, dark matter, and violations of Einstein equivalence principle. I will give an overview of latest results and future prospects for the new physics searches with atomic clocks.

**All DQ-mat members and all interested
are cordially invited to attend.**