



Seminarankündigung

**Freitag, 29. Juni 2018
12:30 Uhr**

WSI, Seminarraum S 101

“Acoustic frequency combs”

Optical frequency combs are currently an invaluable tool of scientific research to perform precision measurements with application in spectroscopy, timing and ranging. A subset of optical frequency combs, the Kerr frequency combs have received a great deal of interest as a new means to produce optical femtosecond pulses using integrated nonlinear optical resonators. The interest in the Kerr frequency combs is also fundamental as it allows access to interesting dynamics that include solitons, rogue waves, and Turing patterns.

The mechanical counterpart of frequency combs and soliton pulses is an equally interesting topic, particularly as it applies for MEMS and NEMS devices. This presentation will briefly introduce the basics of Kerr frequency combs in optics, and how it is possible to produce such comb-like structures in M/NEMS devices. The work presented summarize the state of the art in literature as well as current research efforts being undertaken in NTT-Basic Research Laboratories.

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