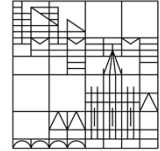


Physikalisches Kolloquium

Universität
Konstanz



Di 23.10.18
15:15 Uhr
14:45 Uhr, Kaffee/Tee
R 513



Dr. Stefan Buhmann
Physikalisches Institut
Albert-Ludwigs-Universität Freiburg

Harnessing the vacuum: Macroscopic quantum electrodynamics

The quantum vacuum is governed by fluctuating fields. These virtual photons can have very real consequences such as Casimir or van der Waals forces on polarisable objects. I will show how the structure of the quantum vacuum can be altered and controlled by introducing absorbing and dispersing media and bodies. In this way, forces in colloidal, optomechanical or cavity quantum electrodynamics contexts as well as energy transfer phenomena can be engineered at will.

