



Kevin Wright

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Superfluid Circuits of Ultracold Atoms

Using "designer" optical potentials it is possible to create circuits of ultracold atomic gases with properties analogous to simple superconducting circuits. This talk will focus on results from several proof-of-principle experiments on a BEC "circuit" in a configuration that is analogous to a one-junction superconducting quantum interference device (SQUID). I will discuss some of the limits of this type of this device as a rotation sensor, and outline some other potential opportunities for studying quantum many-body physics with ultra-cold atoms in a ring geometry.

7. Februar 2014, 14:00 Uhr

Universität Ulm, Raum N25/H9
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