Hamburg Photon Science Colloquium

STIMULATION OF QUANTUM PHASES BY TIME-DEPENDENT PERTURBATIONS

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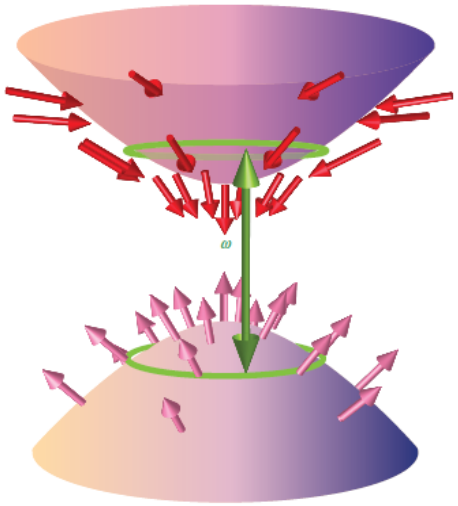
I will review our theory work on dynamic stimulation of various quantum states. A key idea is that the thermal distribution is rarely optimal for occurrence of a given quantum state and dynamic perturbations can be used to enhance it. I will show how both Cooper pairing and phase coherence can be dynamically enhanced in both superconductors and cold atom superfluids. In the second part of the talk, I will discuss periodic-in-time (Floquet) perturbations that can be used to engineer electronic band structure at will in solid-state materials, enabling exotic quantum states to exist.

FRIDAY,
22.01.2016

2:00 PM

CFEL
SEMINAR ROOMS I-III



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