Hamburg Photon Science Colloquium

QUANTUM GAS MICROSCOPY OF MANY-BODY SYSTEMS

PETER SCHAUSS

University of Hamburg, Germany

Strongly correlated quantum systems pose a challenge to theory and experiment. Ultracold atoms in optical lattices have been very successful at performing quantum simulations of Hubbard models. I will first discuss recent developments in site-resolved detection of electronic systems and then present microscopy of three-flavor Hubbard systems, which show a wide variety of novel exotic quantum phases and provide a path towards the study of color superfluidity and other aspects of quantum chromodynamics.

FRIDAY,
19.06.2026

2:00 PM

CFEL
SEMINAR ROOMS I-III
&
ONLINE PRESENTATION
CHECK HHPS.DE FOR
FURTHER INFORMATION