CM / AMO Seminar

Condensed Matter & Atomic Molecular Optical

Thursday, November 14, 2019 / 800 Pupin Hall Thoery Center / 12:00 PM

"Building a quantum computer with neutral atoms"

I will describe our work towards making a quantum computer using ultra-cold atoms trapped in a 3D optical lattice. In particular, I will explain: how we change the quantum state of individual atoms, even in the middle of the array, without affecting the quantum states of other atoms; how we sort atoms by realizing a Maxwell's demon; and how we reliably detect the internal states of the atoms without losing any.

David Weiss,
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CUPhysics