

Abstract Submitted
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Probing prethermalization and Floquet-Bloch dynamics with ultracold lithium in optical lattices¹ CORA FUJIWARA, ETHAN SIMMONS, KEVIN SINGH, ROSHAN SAJJAD, ALEC CAO, DAVID WELD, University of California, Santa Barbara — Ultracold lithium atoms in optical lattices serve as an adaptable platform for studying time dependent quantum systems. We report on experimental and theoretical characterization of prethermalization in a strongly-driven optical lattice with tunable interactions. We also discuss the creation and study of hybridized Floquet-Bloch bands using monochromatic and polychromatic driving.

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