Abstract Submitted
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Physics with Ring Lattices[1] JACOB CHRIST, JOSHUA GARNER, KUNAL DAS, Kutztown University of Pennsylvania — Toroidal or ring-shaped lattices can be used to study a broad range of physical phenomena often with novel features due to the combination of two different kinds of periodicities - the lattice and the boundary condition. Such phenomena include, rotation sensing, nonlienear criticality and spin-squeezing and various topological and synthetic gauge structures. We examine several of these in the context of possible implementation in experiments with ultracold atoms.

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