Periodically driven chains with particle-hole symmetry

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Periodically driven systems possess topological features that have no analog in static systems. In this talk, I will focus on driven chains with particle-hole symmetry. Here, non-trivial drives are responsible for the appearance of edge modes with quasi-energy pinned at half the driving frequency. We discover a novel and computable $\mathbb{Z}_2$ invariant associated to such states. Finally, I will discuss instances of optical and electronic systems where our theory might be tested.

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