

Abstract Submitted
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Low-temperature linear thermal rectifiers based on Coriolis forces¹ SUWUN SUWUNNARAT, HUANAN LI, Department of Physics, Wesleyan University, Middletown, Connecticut 06459, USA, RAGNAR FLEISCHMANN, Max Planck Institute for Dynamics and Self-organization (MPIDS), 37077 Gottingen, Germany, TSAMPIKOS KOTTOS, Department of Physics, Wesleyan University, Middletown, Connecticut 06459, USA — We investigate thermal rectification due to a Coriolis force in a setup of three-terminal symmetric harmonic junctions. By adjusting the angular velocity of the rotating platform, which induces a Coriolis force, we can control the preferred heat transport direction. The concept is demonstrated by using a simple three-terminal triangular lattice.

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