

Abstract Submitted
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Dynamics of Fermionic Vortices¹ SAPTARSHI SARKAR, Washington State University, MICHAEL FORBES, Washington State University, University of Washington, KHALID HOSSAIN, Washington State University, KONRAD KOBUSZEWSKI, Warsaw University of Technology, PIOTR MAGIERSKI, GABRIEL WLAZOWSKI, Warsaw University of Technology, University of Washington — Studying the dynamics of superfluid fermionic vortices can be computationally expensive. In this talk, I will discuss how one can simulate the dynamics of fermionic vortices as a gas of bosonic dimers representing the Cooper pairs. This significantly reduces the computational cost, allowing one to study macroscopic systems. In this talk, I will discuss how polarization affects the properties and dynamics of fermionic vortices, and to what extent these properties can be captured by bosonic simulations.

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