

Abstract Submitted  
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**Photoelectron Spin Control in Spin-Orbit Systems** KENNETH GOTLIEB, University of California Berkeley, CHRISTOPHER JOZWIAK, Lawrence Berkeley National Laboratory, JONATHAN SOBOTA, ZHI-XUN SHEN, Stanford University, ZAHID HUSSAIN, Lawrence Berkeley National Laboratory, ALESSANDRA LANZARA, University of California Berkeley, Lawrence Berkeley National Laboratory — Significant experimental and theoretical interest has followed the observation that the spin polarization of photoelectrons from a topological surface state can be controlled by choice of probing photons. We expand these findings by investigating other systems with strong spin-orbit coupling. Spin- and angle-resolved photoemission measurements from a uniquely efficient and high resolution spectrometer using various photon polarizations reveal the extent and limits of this spin-dependent photoemission process.

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