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Weyl semimetals with a boundary at z=0- a photoemission study¹ DAVID SCHMELTZER, City College of New York — We consider a Weyl semimetal Hamiltonian with two nodes and derive the scattering Hamiltonian in the presence of a boundary at z=0. We compute the photoemission spectrum and demonstrate the presence of the Fermi arcs which connect the two nodes. We observe the one dimensional chiral anomaly in the presence of an electric field parallel to the scattering surface.

¹Los-Alamos National Laboratory , New Mexico

David Schmeltzer City College of New York

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