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**Line node semimetals** VIVEK AJI, MICHAEL PHILLIPS, University of California Riverside — Weyl semimetals are remarkable states of matter that have chiral surface states, despite being gapless in the bulk. They are characterized by the touching of two non degenerate bands at an even number of points in the Brillouin zone. A variant of these is a semimetal with line nodes, rather than points, which is realized in a heterostructure made up of alternating layers of topological and magnetic insulators. In this talk we explore the properties of this system such as the low energy density of states, conductivity and expected oscillatory signatures in magnetic fields. In particular we focus on the parametric dependence on magnetization which offers a knob to tune the properties of the system.

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