**Type-I and Type-II nodal lines in a magnetic hexagonal InC sheet**

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Based on first-principles calculations, we design a novel two-dimensional magnetic material exhibiting symmetry-protected nodal lines in momentum space. We first show that indium carbide crystallizes in a single layered form of a hexagonal honeycomb lattice. Then, we show that hexagonal InC energetically favors ferromagnetic ordering of spins. An interesting feature unique to this magnetic two-dimensional material is the Fermi surface geometry. We find that both type-I and type-II nodal lines occur near the Fermi level in momentum space. While an alternating chain of electron and hole pockets appears in the Fermi sufrace for both type-I and type-II cases, it is shown that the Fermi surfaces exhibit characterisitc geometries distinctive between the type-I and type-II due to different signs of their band velocities. Our findings suggest that *h*-InC may provide a new venue for 2D magnetism and the Fermi surface topology.