

Abstract Submitted
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Topological property and phase transition in three dimensional Dirac semimetal YONGPING DU, BO WAN, XIANGANG WAN¹, Nanjing University — Based on first-principles calculations and effective model analysis, we find a new three dimensional Dirac semimetal. This material has a Dirac point protected by crystal symmetry. It can be driven into various topological phases and Weyl semimetal state by breaking symmetries. This material may have linear quantum magnetoresistance, quantum spin Hall effect.

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