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**Topological states of Sb thin films over doped graphene<sup>1</sup>** CHIH-SUAN LEE, CHIH-KAI YANG, National Chengchi University — Electronic properties of Sb thin films on pure, boron-doped, and nitrogen-doped graphene are investigated using density functional calculations. Various stacking configurations are taken into consideration. Sb films on boron-doped graphene have stronger interaction than those on pure or nitrogen-doped graphene. Dirac cones also occur in these systems and can serve as conduits for spin-polarized conduction. The results are useful for applications in topological transport and spintronics.

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