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Title: ELECTRONIC-STRUCTURE OF CHIRAL GRAPHENE TUBULES

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Abstract: The electronic structure for graphene monolayer tubules is predicted as a function of the diameter and helicity of the constituent graphene tubules. The calculated results show that approximately 1/3 of these tubules are a one-dimensional metal which is stable against a Peierls distortion, and the other 2/3 are one-dimensional semiconductors. The implications of these results are discussed.

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