

Abstract Submitted  
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**Location of Singularities in tight-binding wave function of loop-ordered states with Chern numbers** YAN HE, CHANDRA VARMA, University of California Riverside — As a pedagogic exercise, we consider time-reversal violating tight-binding wave-functions for Haldane states in the Graphene model and in a Copper-Oxide model. We locate the singularities in the wave-functions and derive the movement in their location as well as the change in the Berry phase with the choice of Gauge.

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