

Abstract Submitted  
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**Wess-Zumino-Witten terms in graphene Landau levels** JUNHYUN LEE, SUBIR SACHDEV, Department of Physics, Harvard University — We consider the interplay between the antiferromagnetic and Kekulé valence bond solid orderings in the zero energy Landau levels of neutral monolayer and bilayer graphene. We establish the presence of Wess-Zumino-Witten terms between these orders: this implies that their quantum fluctuations are described by the deconfined critical theories of quantum spin systems. We present implications for experiments, including the possible presence of excitonic superfluidity in bilayer graphene.

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