Velocity renormalization in multilayer graphene

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Multilayer graphene has recently attracted considerable attention because of its chiral electronic structure which is sensitive to stacking sequences, and its possible use as the basis of new electronic devices. Furthermore, as sample quality improves, it is expected that electron-electron interactions play a significant role which was hidden by disorder. In this talk, we study velocity renormalization in multilayer graphene due to electron-electron interactions. After analyzing velocity renormalization in the chiral two-dimensional electron gas which is a low-energy effective model of graphene systems, we discuss its implication for multilayer graphene.