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**Quasiparticle renormalization in ABC graphene trilayers**[1] XU DOU, AKBAR JAEFARI, University of Oklahoma, YAFIS BARLAS, University of California at Riverside, BRUNO UCHOA, University of Oklahoma — We investigate the effect of electron-electron interactions in ABC stacked graphene trilayers. In the gapless regime, we show that the self-energy corrections lead to the renormalization of the dynamical exponent $z = 3 + \alpha_1/N$, with $\alpha_1 \approx 0.52$ and $N$ is the number of fermionic species. Although the quasiparticle residue is suppressed near the neutrality point, the lifetime has a sublinear scaling with the energy and the quasiparticles are well defined even at zero energy. We calculate the renormalization of a variety of physical observables, which can be directly measured in experiments.

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