

Abstract Submitted  
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**Spin density wave formation in graphene facilitated by the in-plane magnetic field** SEBASTIAN REYES, Stony Brook University and Brookhaven National Laboratory, ALEXEI TSVELIK, Brookhaven National Laboratory — We suggest that by applying a magnetic field lying in the plane of graphene layer one may facilitate an excitonic condensation of electron-hole pairs with opposite spins and chiralities. The provided calculations yield a conservative estimate for the transition temperature  $T_c \sim 0.1 B$ .

Sebastian Reyes  
Stony Brook University and Brookhaven National Laboratory

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