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Title:Polarization-sensitive absorption of THz radiation by interacting electrons in chirally stacked multilayer graphene
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Abstract:We show that the opacity of a clean multilayer graphene flake depends on the helicity of the circular polarized electromagnetic radiation. The effect can be understood in terms of the pseudospin selection rules for the interband optical transitions in the presence of exchange electron-electron interactions which alter the pseudospin texture in momentum space. The interactions described within a semi-analytical Hartree-Fock approach lead to the formation of topologically different broken symmetry states characterized by Chern numbers and zero-field anomalous Hall conductivities. © IOP Publishing Ltd and Deutsche Physikalische Gesellschaft.
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