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Ballistic transport and densiy of states of modulated bilayer graphene LIUBOV ZHEMCHUZHNA, Hunter College, CUNY, DANHONG HUANG, Air Force Research Laboratory, Space Vehicles Directorate, GODFREY GUMBS, Hunter College, CUNY and Donostia International Physics Center (DIPC), ANDRII IUROV, University of New Mexico and Hunter College, CUNY — The magnetic band structure for electrostatically modulated bilayer graphene is calculated. We include the K and K' valleys. A and B sublattices as well as the bilayer crystalline structure. The energy eigenvalues are obtained as functions of wave vector as well as magnetic field.[1] Our results are then employed in calculating density-of-states and ballistic conductance. Comparison with recent experimental results is presented.

[1]Godfrey Gumbs, Andrii Iurov, Danhong Huang, and Liubov Zhemchuzhna: Phys. Rev. B **89**, 241407(R) (2014).

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