Abstract Submitted
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Spin-Polarized Transport on Photo-Asisted Bilayer Graphene Ribbons[1] DAVID ZAMBRANO, LUIS ROSALES, PEDRO ORELLANA, Departamento de Física, Universidad Técnica Federico Santa María, Casilla 110-V, Valparaíso, Chile, ANDREA LATGÉ, Instituto de Física, Universidade Federal Fluminense, 24210-340 Niterói-RJ, Brazil — We show how both transmission and spin polarization [1,2] behave in bilayer graphene ribbons in contact with a ferromagnetic insulator while a laser is applied to the ribbon. Using a π-orbital tight-binding model as a low energy approximation [1] and the Tien-Gordon [3] formalism we explore how these systems behave when the ribbon is photo-assisted with a laser. For particular values of the laser parameters, the Fano antiresonance are removed enhancing the transmission while for others spin-polarized transport will arise.

References

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