

Abstract Submitted
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Spin Dependent Scattering in Nanotubes YONATAN ABRANYOS,
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City University of New York, 695 Park Avenue New York, NY 10065 — Using a
continuum model, we obtain analytical expressions for the spin-split energy bands
for electrons on the surface of nanotubes in the presence of Spin-Orbit Interaction.
Each energy level could then be used to accommodate the two types of spin. We
calculate the scattering amplitude from a barrier around the axis of the nanotube
into various spin-dependent states.

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