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Inelastic Scattering in Point Contacts Between a Normal Ferromagnetic Half-Metal and a Superconductor CHARLES W. SMITH, University of Maine, Orono, ME, PAUL J. DOLAN, JR., Northeastern Illinois University, Chicago, IL — A model for conductance in N/S point contacts, including spin polarization[1] is modified to incorporate inelastic scattering, i.e., quasiparticle finite-lifetime effects. For the half-metal limit of this model, we present calculations of zero bias conductance as a function of temperature and normalized conductance as a function of voltage, for the entire parameter space of the model.

[1]G.J. Strijkers, Y. Li, F.Y. Yang, C.L. Chien and J.M. Byers, Phys. Rev. B 63, 104510 (2001).

Paul Dolan, Jr.
Northeastern Illinois University

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