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Keldysh study of point-contact tunneling between supercon-ductors C.J. BOLECH, University of Geneva, T. GIAMARCHI, University of Geneva — We revisit the problem of point-contact tunnel junctions involving one-dimensional superconductors and present a simple scheme for computing the full current-voltage characteristics within the framework of the non-equilibrium Keldysh Green function formalism. The effects of different spin-pairing symmetries, combined with magnetic fields and finite temperatures, at arbitrary bias voltages are addressed. We propose ways of measuring the effects found when the two sides of the junction have dissimilar superconducting gaps and when the symmetry of the superconducting states does not correspond to spin-singlet pairing.

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