Quantum Monte Carlo-simulation for the conductance of one-dimensional quantum-spin systems KIM LOUIS, University of Crete, 71003 Herakleion, Crete, CLAUDIUS GROS — We study the conductance in spin systems with a Monte Carlo approach using the stochastic series expansion (SSE). This allows the evaluation of the conductance at low temperatures in quasi one-dimensional systems. This method is applied to anisotropic Heisenberg chains, Kane-Fisher scaling for one impurity in a Luttinger-liquid, and the spin drag problem in the Hubbard model.

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