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Nonequilibrium Transport in a biased Quantum Dot¹ SUNG CHAO, GUILLAUME PALACIOS, Rutgers University, ANDRES JEREZ, New Jersey Institue of Technology, CARLOS BOLECH, Rice University, PANKAJ MEHTA, Princeton University, NATAN ANDREI, Rutgers University — We derive the transport properties of a quantum dot subject to a source-drain bias at zero temperature and magnetic field. Using the Scattering Bethe Anstaz, a generalization of the traditional Thermodynamic Bethe Anstaz to open systems out of equilibrium, to obtain dot occupation and current as a function of voltage numerically.

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