Abstract Submitted
for the MAR17 Meeting of
The American Physical Society

Tackling Quantum Thermodynamics via Quantum Collision Models FRANCESCO CICCARELLO, NEST, Istituto Nanoscienze-CNR and Dipartimento di Fisica e Chimica, Universit degli Studi di Palermo, SALVATORE LORENZO, Quantum Technology Lab, Dipartimento di Fisica, Universit degli Studi di Milano, and INFN, Sezione di Milano, G. MASSIMO PALMA, NEST, Istituto Nanoscienze-CNR and Dipartimento di Fisica e Chimica, Universit degli Studi di Palermo — Quantum collision models embody an advantageous tool for studying open-quantum-system dynamics within a microscopic and physically well-defined framework, which allows to address some problems intractable with other approaches. In this talk, we will show the potential of collision models to shed light on non-equilibrium quantum thermodynamics issues, such as the Landauers principle and quantum fluctuation theorems.

Harold Baranger
Duke Univ

Date submitted: 10 Nov 2016 Electronic form version 1.4