

Abstract Submitted
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Relation between Full Counting Statistics and the flow of Shannon entropy MOHAMMAD ANSARI, YULI NAZAROV, Kavli Institute for nanoscience, Delft University of Technology — We show that microscopic theory of counting statistics that is applicable for many quantum noise analysis, has an internal and fundamental correspondence to the Renyi entropy flow in the quantum system. This analogy reveals an interesting step towards understanding quantum thermodynamics. We also further extend the formulation for the flows of entropy using full counting statistics and determine novel quantum terms in the statistical moment measurements.

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