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Entropy flow in quantum heat engines MOHAMMAD ANSARI, YULI NAZAROV, Kavli Institute for Nanoscience, Delft University of Technology — We evaluate Shannon and Renyi entropy flows from generic quantum heat engines (QHE) to a weakly-coupled probe environment kept in thermal equilibrium. We show the flows are determined by two quantities: heat flow and fictitious dissipation that manifest the quantum coherence in the engine. Our theory leads to novel physics in quantum heat engines.

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