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## **【405】 Universal entropy transport far from equilibrium across the BCS-BEC crossover**

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The transport properties of strongly interacting fermionic systems can reveal facets of their unknown nature, but experiments and theory have mostly focused on the hydrodynamic limit. However, a ballistic channel connecting two superfluid reservoirs of unitary Fermi gases can reach a far-from-equilibrium regime where particle and entropy currents respond nonlinearly to biases of chemical potential and temperature. Here, we explore the coupled transport of particles and entropy tuning the interaction across the BCS-BEC crossover. Surprisingly, the entropy advectively transported per particle depends only on the interactions and reservoir degeneracy and not on the details of the channel, suggesting that this property originates from the universal equilibrium properties of the reservoirs.

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