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**Higher-Than-Ballistic Conduction in Viscous Electron Fluids**

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Strongly interacting electrons can move in a neatly coordinated way, reminiscent of the movement of viscous fluids. This talk will argue that in viscous flows interactions facilitate transport, allowing conductance to exceed the fundamental Sharvin-Landauer quantum-ballistic limit. The effect is particularly striking for the flow through a viscous point contact, a constriction exhibiting the quantum-mechanical ballistic transport at $T = 0$ but governed by electron hydrodynamics at elevated temperatures. Conductance grows as a square of the constriction width, i.e. faster than the linear width dependence for noninteracting fermions. The crossover between the ballistic and viscous regimes occurs when the mean free path for e-e collisions becomes comparable to the constriction width. Further, we will discuss the negative nonlocal response, a signature effect of viscous transport. This response exhibits an interesting nonmonotonic behavior vs. $T$ at the viscous-to-balistic transition. The response is negative but small in the highly viscous regime at elevated temperatures. The value grows as the temperature is lowered and the system becomes less viscous, reaching the most negative values in the crossover region where the mean free path is comparable to the distance between contacts. Subsequently, it reverses sign at even lower temperatures, becoming positive as the system enters the ballistic regime. This peculiar behavior provides a clear signature of the ballistic-to-viscous transition and enables a direct measurement of the electron-electron collision mean free path.