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Electrical resistivity across a nematic quantum critical point

Evidence for electronic nematicity has been reported in a host of metallic systems that exhibit this so-called quantum critical behaviour. In all cases, however, the nematicity is found to be intertwined with other forms of order, such as antiferromagnetism or charge density wave, that might themselves be responsible for the observed behaviour. $FeSe_{1-x}S_x$ is unique in this respect since nematic order appears to exist in isolation, though until now, the impact of nematicity on the electronic ground state has been obscured by superconductivity. Here, we use high magnetic fields to destroy the superconducting state in $FeSe_{1-x}S_x$ and follow the evolution of the electrical resistivity across the nematic quantum critical point. Classic signatures of quantum criticality are revealed, including a divergence in the coefficient of the T^2 resistivity on approaching the critical point and, at the critical point itself, a strictly T-linear resistivity that extends over a decade in temperature. In addition to revealing the phenomenon of nematic quantum criticality, the observation of T-linear resistivity at a nematic critical point also raises the question whether strong nematic fluctuations play a role in the transport properties of other strange metals.