Non-Fermi-liquid behavior close to a ferromagnetic quantum critical point

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A magnetic quantum critical point (QCP) occurs when a long-range magnetic order is continuously suppressed to zero temperature. The intense quantum fluctuations in the vicinity of a QCP profoundly alter a material's electronic properties, resulting in non-Fermi liquid behavior. The most ubiquitous QCP separates an antiferromagnetically ordered state from one in which quantum fluctuations disrupt the order. QCPs in ferromagnetic (FM) metals have proven far more elusive as they are inherently unstable. In this talk, I will provide experimental evidence of two FM QCPs in itinerant and local-moment systems.