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Evidence for a generic quantum transition in high-Tc cuprates.

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The progressive evolution of physical properties with doping in the high-Tc cuprates remains a puzzle, as does the origins of superconducting pairing. This talk will focus on a broad range of physical properties that all signal the presence of a generic quantum transition near optimal doping in these materials which helps explain this unusual evolution in properties. The data includes specific heat, NMR, transport, muon spin relaxation, inelastic neutron scattering, frequency dependent IR conductivity and magnetic properties. In spite of the weight of evidence, however, some key elements appear to be missing. Reasons for this will be surveyed.