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Universal behavior in heavy electron materials

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I describe improvements in the phenomenological two-fluid theory that enable one to reconcile the thermal and magnetic measurements of the collective deconfinement of localized spins in Kondo lattice materials that begins at T^* and leads to the formation of a new quantum state of matter - the heavy electron Kondo Liquid (KL). The resulting phenomenological KL density of states provides a good fit to the theoretical results for Ir 115 and its experimental measurement in Knight shift and Hall effect anomalies, tunneling experiments, and Raman scattering in the 115 materials. I discuss the relationship between T^* and the single ion Kondo temperature and present an updated version of the Doniach diagram for heavy electron materials.