

Abstract Submitted  
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**Entanglement in Anderson Nanoclusters**<sup>1</sup> PETER SAMUELSSON,  
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— We investigate the two-particle spin entanglement in magnetic nanoclusters described by the periodic Anderson model. An entanglement phase diagram is obtained, providing a novel perspective on a central property of magnetic nanoclusters, namely the temperature dependent competition between local Kondo screening and nonlocal Ruderman-Kittel-Kasuya-Yoshida spin ordering. We find that multiparticle entangled states are present for finite magnetic field as well as in the mixed valence regime and away from half filling. Our results emphasize the role of charge fluctuations.

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