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Entanglement entropy and boundary operators in quantum impurity systems ERIK ERIKSSON, HENRIK JOHANNESSON, University of Gothenburg — Entanglement in quantum impurity systems can be studied analytically using boundary conformal field theory (BCFT). In particular, the effect from an impurity on the entanglement entropy of a surrounding region is governed by the boundary operator content of the model. We present general results for the corrections to scaling of the Rényi entanglement entropies when perturbing the BCFT with boundary operators [arXiv:1011.0448]. These results are then used to predict the asymptotic large-block behavior of the impurity contribution to the entanglement entropy in various Kondo systems.

Erik Eriksson
University of Gothenburg

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