

Contribution Title:	TWO INTEGRABLE QUANTUM IMPURITY MODELS
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We report exact results for two related integrable quantum impurity models. The impurity, a localized magnetic moment, is coupled to a mesoscopic ring. A magnetic flux through the ring induces a persistent current via the Aharonov-Bohm effect. This persistent current, a genuine finite-size effect, is calculated exactly by a finite-size Bethe ansatz analysis for the two models. Remarkably, we find that the persistent current is insensitive to the presence of the quantum impurity. This protection of the persistent current from the quantum impurity only exploits the generic symmetry of the Bethe ansatz equations. We therefore argue that this protection is a universal property of a large class of integrable quantum impurity models. Therefore it constitutes a further characteristic of integrable quantum impurity models, similar to the absence of backscattering at an integrable impurity.