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### Mesoscopic multi-terminal thermoelectrics

Recently, there has been a growing interest in thermoelectrics based on mesoscopic solid-state physics due potential applications in converting waste heat back into useful electricity. Of particular interest for energy harvesting applications are three-terminal setups based on Coulomb-coupled quantum dots. I will discuss such systems based on quantum dots in the Coulomb-blockade regime [1] that can act as optimal heat to current converters. I will also present setups with chaotic cavities [2] and resonant tunneling quantum dots [3]. The latter are found to be both powerful and efficient at the same time. In addition, I will also discuss recent work on chiral thermoelectrics with quantum Hall edge states [4,5].

[1] R. Sánchez and M. Büttiker, PRB 83, 085428 (2011). [2] B. Sothmann, R. Sánchez, A. N. Jordan and M. Büttiker, PRB 85, 205301 (2012). [3] A. N. Jordan, B. Sothmann, R. Sánchez and M. Büttiker, PRB 87, 075312 (2013). [4] B. Sothmann, R. Sánchez and A. N. Jordan, EPL 107, 47003 (2014). [5] R. Sánchez, B. Sothmann and A. N. Jordan, PRL 114, 146801 (2015).

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