# Experimental demonstration of an atomic-scale heat pump

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At the limit of electronic conductor miniaturization, quantum phenomena can open the door for attractive heat-pumping schemes. I will discuss our recent demonstration of an all-metal atomic-scale heat pump. In this system, the combination of a many-body effect and quantum interference yields significant Peltier cooling. We find a Seeback coefficient that is higher by two orders of magnitude than detected in any other metallic system. The prepared atomic-scale heat pump can serve as an experimental platform for studying thermal management in a many-body system, with heat pumping that is significant enough for future applications.