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Real space study of current flow through nanoscopic Kondo lattices JOHN VAN DYKE, DIRK MORR, University of Illinois at Chicago — We study current flow through a nanoscopic Kondo lattice in real space and with finite applied voltage. We show how the presence of a defect, such as an f-electron vacancy, modifies the current flow in its vicinity, depending on lead geometry and coupling to phonons. Finally, we report a self-consistent calculation of the change in the hybridization between the conduction and f-electrons caused by the applied bias.

John Van Dyke University of Illinois at Chicago

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