## Fractional Moment Methods for Finite Rank Perturbations

ROBERT SIMS University of California at Irvine

We introduce new methods to prove fractional moment bounds on finite rank perturbations of the discrete Laplacian in  $\ell^2(\mathbb{Z}^d)$ . Our techniques provide a simple new proof of localization for Anderson-type models in which the single site potential is supported on an arbitrary cube in  $\mathbb{Z}^d$ .