Unitary Renormalization Group Approach to the Anderson model

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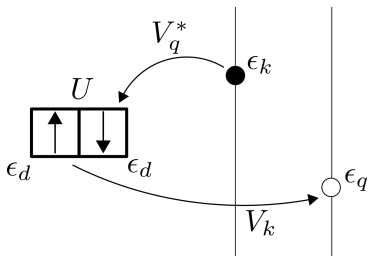
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Outline

- The model
- Motivation
- URG formalism
- Results

Single-Impurity Anderson Model

kinetic energy

hopping between
impurity and bath

single-impurity
energy

impurity-impurity
repulsion

$$\mathcal{H} = \sum_{k\sigma} \epsilon_k \hat{n}_{k\sigma} + \sum_{k\sigma} \left[V(k) c_{k\sigma}^\dagger c_{d\sigma} + \text{h.c.} \right] + \epsilon_d \sum_\sigma \hat{n}_{d\sigma} + U \hat{n}_{d\uparrow} \hat{n}_{d\downarrow}$$

Options

They admit any *positive* or *negative* spacing unit

Note that some warnings about *badboxes* might be generated at compilation

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