a

Lattice embedded impurity model

w

t

v

U

J → impurity

conduction bath
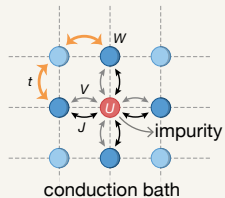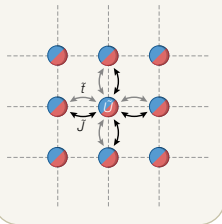
Unitary RG analysis →

Fixed-point impurity model

w

t

U

J
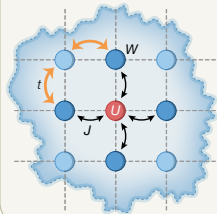
Tiling gives Hamiltonian of

Tiling gives low-energy properties of

Lattice model of correlated electrons

$\tilde{t}$

U

J

b
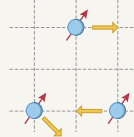
Fermi liquid

Itinerant Landau quasiparticles

Spectral density

Peak in Density of States at Fermi energy

E_F Energy
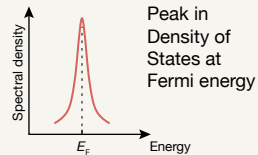
Creation of Luttinger surfaces ↓

Pseudogap-Mott metal
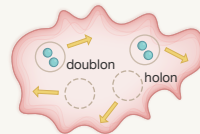
doublon

holon

Deconfined holons & doublons of entangled non-Fermi liquid

Spectral density

Pseudogap in DOS at Fermi energy

0 Energy
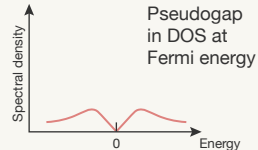
Confinement of holons and doublons ↓

Mott insulator

doublon holon $\equiv$

Confined holons & doublons form local moments on lattice

Spectral density

Gap in DOS at Fermi energy

Δ_- 0 Δ_+ Energy