

Abstract Submitted
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Mechanism of orbital-selective phase transition by different magnetic states HUNPYO LEE, YU-ZHONG ZHANG, HARALD O. JESCHKE, ROSER VALENTI, None — Using a dynamical cluster approximation we analyzed the behavior a degenerated two-orbital anisotropic Hubbard model at half-filling where both orbitals have equal bandwidths and one orbital is in paramagnetic (PM) state while the other one is in antiferromagnetic (AF) solution. We found an orbital-selective metal-insulator transition in which the PM orbital undergoes a transition from a Fermi liquid (FL) to a Mott insulator through a non-FL, while the AF orbital displays a transition from a FL to an AF insulator through an AF metallic phase. Finally, we would discuss that our intermediate phases are possibly related to the puzzling AF metallic state iron-pnictide superconductors.

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None

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