

Abstract Submitted  
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**Metal-Insulator Transitions in the Periodic Anderson Model** GIOVANNI SORDI, ADRIANO AMARICCI, MARCELO ROZENBERG, Laboratoire de Physique des Solides, CNRS-UMR8502, Université de Paris-Sud, Orsay 91405, France — We investigate the doping driven metal-insulator transition in the periodic Anderson model in the Mott-Hubbard regime, using dynamical mean-field theory. Upon electron doping of the Mott-insulator, a metal-insulator transition occurs, which shares the same qualitative features of the first order transition found in the single band Hubbard model. Surprisingly, upon hole doping, the metal-insulator transition is not first order. Thus our study demonstrate that the transition scenario of the single band Hubbard model is not generic for the periodic Anderson model, even in the Mott-Hubbard regime. *Phys. Rev. Lett.* **99**, 196403 (2007)

Giovanni Sordi  
Laboratoire de Physique des Solides, CNRS-UMR8502,  
Université de Paris-Sud, Orsay 91405, France

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