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**Existence of a metallic magnetically ordered state at intermediate Hubbard couplings in multi-orbital models for undoped iron pnictides<sup>1</sup>**

RONG YU, University of Tennessee and ORNL, KIEN TRINH, University of Southern California, ADRIANA MOREO, MARIA DAGHOFER, University of Tennessee and ORNL, JOSE RIERA, Universidad Nacional de Rosario, Argentina, STEPHAN HAAS, University of Southern California, ELBIO DAGOTTO, University of Tennessee and ORNL — We present the results of a mean-field study for models that describe undoped iron pnictides. A realistic four-orbital model including iron  $d_{xz}$ ,  $d_{yz}$ ,  $d_{xy}$ , and  $d_{x^2-y^2}$  orbitals is mainly discussed. Results for a two-orbital model with  $d_{xz}$  and  $d_{yz}$  orbitals are also shown. In both models, we report the existence of a novel intermediate coupling regime where the system is metallic and exhibits a striped spin order. Several properties of this state are discussed. By performing a mean-field study of other models for iron pnictides, we argue that such a metallic striped ordered phase is a general feature of the theoretical models describing iron pnictides.[1]

[1] R. Yu et al., submitted for publication.

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Rong Yu  
University of Tennessee and ORNL

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