CMSN PCSCS Coordination Meeting
March 9, 2008
Predictive Capability for Strongly Correlated Systems

Server “issue” at Davis.
PCSCS web pages will be reconstructed and updated.
PCSCS Postdocs
1. Alexander Macridin (Jarrell, Cincinnati)
2. Wissam A. Al-Saidi (Umrigar, Cornell)
3. Chi-Cheng Lee (Ku, BNL)
4. Wirawan Purwanto (Zhang & Krakauer, Wm&Mary)
5. Anton Kozhevnikov (Eguiluz, UTK & ORNL)
6. [Quan Yin] (Pickett & Scalettar, UCDavis)
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PCSCS-related APS Invited Talks

Savrasov, Sergey   A3.00002
Computational Approaches for Strongly Correlated Materials: an Electronic Structure Theory Perspective

Jarrell, Mark       X7.00004
DCA study of magnetic mediated superconductivity in the Hubbard model

Kunes, Jan          Y23.00001
Magnetic Moment Collapse-Driven Mott Transition in MnO
LDA+DMFT “predictive” theory of the Mott transition under pressure was published in *Nature Materials*, March 2008. This is substantive, and highly visible, progress on the “signature problem” of PCSCS.

**ARTICLES**

Collapse of magnetic moment drives the Mott transition in MnO

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Program Agenda

“Towards a diffusion Monte Carlo study of Mott transition in MnO under pressure” Wissam A. Al-Saidi
"Super atom approach to local excitations in strongly correlated systems”. Chi-Cheng Lee
"Local breaking of C4 symmetry in the pseudogap phase of the Hubbard Model.” Alexander Macridin
“Progress report on auxiliary-field QMC for strongly correlated systems.” Wirawan Purwanto

Breakout sessions: coordinating research, planning visits