CURRICULUM VITAE

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PROFESSIONAL EXPERIENCE:

08/2012 – Present: Associate Professor, Institute of Theoretical Physics, Chinese Academy of Sciences, P. R. China

08/2010 – 07/2012: Research Associate, Boston College, USA

09/2009 – 07/2010: Research Associate, Rutgers University, USA

09/2007 – 08/2009: Postdoctoral Associate, National High Magnetic Field Laboratory, Florida State University, USA

09/2001 – 08/2007: Research/Teaching Assistant, Boston College, USA

09/1999 – 07/2001: Research Assistant, Xiamen University, P. R. China

EDUCATION:

September 2001 – August 2007: Boston College, Chestnut Hill, MA, USA

Doctor of Philosophy in Physics (08/2007)

Thesis Title: "*Electron correlation and geometric frustration in Na_xCoO_2*" (Advisor: Ziqiang Wang)

Master of Science in Physics (12/2002)

September 1995 – July 2001: Xiamen University, Fujian, P. R. China

Graduate student in Physics (09/1999 – 07/2001)

Bachelor of Science in Physics (07/1999)

RESEARCH INTERESTS:

Quantum condensed matter, strongly correlated electron systems.

High temperature superconductors: cuprates and iron pnictides.

Quantum phases and phase transitions of doped Mott insulators.

Quantum electronic states and topologically ordered phases.

Numerical methods for quantum many-body systems.

RESEARCH GRANTS:

The 1000 Talents Plan for Young Researchers of China (08/2012 – 12/2016).

Youth Innovation Promotion Association, CAS (01/2013 – 12/2016)

JOURNAL PUBLICATIONS:

(1) **S. Zhou**, Y. Wang, and Z. Wang, "*Doublon-Holon binding, Mott transition, and fractionalized antiferromagnet in the Hubbard model*", Preprint on arXiv:1302.5427 (2013).

(2) **S. Zhou**, G. Kotliar, and Z. Wang, "*Extended Hubbard model of superconductivity driven by charge fluctuations in iron-pnictides*", Phys. Rev. B **84**, 140505(R) (2011).

(3) **S. Zhou** and Z. Wang, "*Electron correlation and spin density wave order in iron pnictides*", Phys. Rev. Lett. **105**, 096401 (2010).

(4) **S. Zhou**, J. A. Hoyos, V. Dobrosavljević, and E. Miranda "*Valence-bond theory of highly disordered quantum antiferromagnets*", Europhys. Lett. **87**, 27003 (2009).

(5) **S. Zhou** and Ziqiang Wang, "*Nodal d+id pairing and topological phases on the triangular lattice of $Na_xCoO_2{\cdot}yH_2O$: evidence for an unconventional superconducting state*", Phys. Rev. Lett. **100**, 217002 (2008).

(6) F. C. Niestemski, S. Kunwar, **S. Zhou**, S. Li, H. Ding, Z. Wang, P. Dai, and V. Madhavan, "*A distinct bosonic mode in an electron-doped high-transition-temperature superconductor"*, Nature **450**, 1058 (2007).

(7) **S. Zhou** and Z. Wang, "*Charge and spin order on the triangular lattice: Na_xCoO_2 at $x=0.5$*", Phys. Rev. Lett. **98**, 226402 (2007).

(8) M. Gao, **S. Zhou**, and Z. Wang, "*Itinerant and localized magnetism on the triangular lattice: Sodium-rich phases of Na_xCoO_2*", Phys. Rev. B **76**, 180402(R) (2007).

(9) **S. Zhou**, H. Ding, and Z. Wang, "*Correlating off-stoichiometric doping and nanoscale electronic inhomogeneity in the high-T_c superconductor $Bi_2Sr_2CaCu_2O_{8+x}$*", Phys. Rev. Lett. **98**, 076401 (2007). Selected for Virtual Journal of Applications of Superconductivity (Volume 12, Issue 4) and Virtual Journal of Nanoscale Science & Technology (Volume 15, Issue 8).

(10) C. Li, **S. Zhou**, and Z. Wang, "*Inhomogeneous states with checkerboard order in the t-J Model*", Phys. Rev. B **73**, 060501(R) (2006).

(11) **S. Zhou**, M. Gao, H. Ding, P. A. Lee, and Z. Wang, "*Electron correlation and Fermi surface topology of Na_xCoO_2*", Phys. Rev. Lett. **94**, 206401 (2005).

(12) **S. Zhou**, and Z. Wang, "*Pseudogap, competing order and coexistence of staggered flux and d-wave pairing in high temperature superconductors*", Phys. Rev. B **70**, 020501(R) (2004).