

B Sriram Shastry

Recent Publications

- “Finite temperature properties of the triangular lattice t-J model, applications to Na_xCoO_2 ”, J O Haerter, M R Peterson, B. S Shastry, cond-mat/0608005 (2006), Phys. Rev. **B**(2006).
- “Strong Correlations Produce the Curie-Weiss Phase of Na_xCoO_2 ”, J O Haerter, M R Peterson, B. S Shastry, cond-mat/0607293 (2006), Phys. Rev. Lett. (2006).
- “A Sum Rule for Thermal Conductivity and Dynamical Thermal Transport Coefficients in Condensed Matter -I”, B. S. Shastry, cond-mat/0508711 (2005), Phys. Rev. **B** **73**, 085117 (2006).
- “Degeneracy and Strong Fluctuation-Induced First-Order Phase Transition in the Dipolar Pyrochlore Antiferromagnet”, O. Cèpas, A. P. Young, B. S. Shastry, cond-mat/0507289 (2005), Phys. Rev. **B** **72** 184408 (2005).
- “Kinetic Antiferromagnetism in the Triangular Lattice”, J. O. Haerter and B. S. Shastry, cond-mat/0505627; Phys. Rev. Letts. **95** 087202, 2005.
- “A Class of Parameter Dependent Commuting Matrices” B. S. Shastry cond-mat/0501502, J Phys. **A** **38** L431 (2005).
- “Spin-s wavefunctions with algebraic order”, Onuttom Narayan, B. S. Shastry cond-mat/0406534, Phys. Rev. **B** **70**, 184440 (2004)
- “Field-Driven Transitions in the Dipolar Pyrochlore Antiferromagnet $\text{Gd}_2\text{Ti}_2\text{O}_7$ ”, O Cèpas and B S Shastry, cond-mat/0306638, and Phys. Rev. **B** **69**, 184402 (2004).
- “Superconductivity in CoO_2 Layers and the Resonating Valence Bond Mean Field Theory of the Triangular Lattice t-J model”, B Kumar and B S Shastry, Phys. Rev. **B** **68**, 104508 (2003), also cond-mat 030421.
- “Extracting Hidden Symmetry from the Energy Spectrum”, E Yuzbashyan, W Happer, B L Altshuler, B S Shastry, J Phys **A** **36** 2577-2588 (2003), also cond-mat/0210506.
- “Spin ice and other Frustrated Magnets on the Pyrochlore Lattice”, B S Shastry (Invited Talk at LT23 Hiroshima August 2002) Physica B (Condensed Matter) **329-333** 1024 (2003), also cond-mat/0210230.
- “Hubbard Model on a Decorated Kagomè Lattice”, C D Batista and B S Shastry Phys. Rev. Letts. **91**, 116401 (2003).

- “Quantum Transport Using the Ford-Kac-Mazur formalism”, Abhishek Dhar and B S Shastry, Phys. Rev. **B67**, 195405 (2003), also cond-mat/0209533.
- “ $SrCu_2(BO_3)_2$: A Unique Mott Hubbard Insulator”, B S Shastry and B Kumar, Prog. Th. Phys. Suppl. **145** 1 (2002), also cond-mat/0204228 (2002).
- “The Origin of Degeneracies and Crossings in the 1d Hubbard Model”, E A Yuzhbashyan, B L Altshuler and B S Shastry, J Phys **A 35**, 7525 (2002), also cond-mat/0201551.
- “Multiple Phase Transitions in a Geometrically-Frustrated Dipolar Spin System - $Gd_2Ti_2O_7$ ”, (A P Ramirez, B S Shastry, A Hayashi, J J Krajewski, D A Huse, and R J Cava), Phys. Rev. Letts. **89**, 067202 (2002).
- “Exact Spectral Function of a Non Fermi Liquid in 1 dimension”, (Karlo Penc and B S Shastry), cond-mat/0109339, Phys Rev **B 65**, 155110 (2002).
- “Spin Dynamics of $Sr_{14}Cu_{24}O_{41}$ two-legged ladder studied by Raman spectroscopy”, (A Gozar, G Blumberg, B S Dennis, B S Shastry, N Motoyama, H Eisaki and S Uchida”, Phys. Rev. Letts. **87**, 197202(2001), also cond-mat/0108507.
- “Solution of a generalized Stieltjes Problem”, (B S Shastry and Abhishek Dhar) in print J Phys **A 34**, 6197 (2001), also cond-mat/0101464
- “Spin ordering and partial ordering in holmium titanate and related systems”, (R Siddharthan, B S Shastry and A P Ramirez), Phys Rev **B63**, 184412 (2001), also cond-mat/0009265.
- “Crystal-field interaction in pyrochlore magnet $Ho_2Ti_2O_7$ ”, S Rosenkranz, A P Ramirez, A Hayashi, R J Cava, R Siddharthan and B S Shastry), J App Phys **87**, 5914 (2000).
- “Bloch Walls and Macroscopic String States in Bethe’s solution of the Heisenberg Ferromagnetic Linear Chain”, (A Dhar and B S Shastry), cond-mat/0005397, Phys. Rev. Letts. **85**, 2813 (2000).
- “Equilibrium and Dynamical Properties of the ANNI chain at the multiphase problem”, (with Abhishek Dhar and C. Dasgupta), Phys Rev. **E62**,1592 (2000), also cond-mat/0004207
- “Exact Solution of a Repulsive Fermi Model with Enhanced Superconducting Fluctuations”, (with H R Krishna-Murthy), cond-mat/0004136, Phys. Rev. Letts. **84**, 4918 (2000).
- “Models Exhibiting Order by Projection”, (with B Kumar), Phys. Rev. **B 61** 10716 (2000).