

1. **Dynamics of Random Hydrophobic-Hydrophilic Copolymers with Implications for Protein Folding.**
D. Thirumalai, V. Ashwin, and J. K. Bhattacharjee
Phys. Rev. Lett. **77**, 5385 (1996).
2. **Tunneling conductance of Luttinger liquids: Resonances**
V. Ashvin, G. V. Vijaygovindan, and N. Kumar
Phys. Rev. B. R13239 (1996).
3. **Hydrodynamic Focusing on a Silicon Chip: Mixing Nanolitres in Microseconds.**
J.B. Knight, A. Vishwanath J. P. Brody and R. H. Austin
Phys. Rev. Lett. **80**, 3863 (1998).
4. **Modulation Instability of Incoherent Beams in Noninstantaneous Nonlinear Media.**
M. Soljacic, M. Sagev, T. Coksun, D. Christodoulides, and A. Vishwanath.
Phys. Rev. Lett. **84**, 467 (2000).
5. **Luttinger Liquids Physics in the Superconductor Vortex Core.**
Ashvin Vishwanath and T. Senthil.
Phys. Rev. B **63**, 014506 (2001).
6. **Two Dimensional Anisotropic non-Fermi Liquid Phase of Coupled Luttinger Liquids.**
Ashvin Vishwanath and D. Carpentier,
Phys. Rev. Lett. **86**, 676 (2001).
7. **Quantized Thermal Hall Effect in the Mixed State of d-wave Superconductors.**
Ashvin Vishwanath.
Phys. Rev. Lett. **87**, 217004 (2001).
8. **Dirac Nodes and Quantized Thermal Hall Effect in the Mixed State of d-wave Superconductors.**
Ashvin Vishwanath.
Phys. Rev. B **66**, 06504 (2002).
9. **One-dimensional Quantum Walks.**
A. Ambainis, E. Bach, A. Nayak, A. Vishwanath and J. Watrous.
Proc. 33rd Association of Computing Machinery, STOC, 2001.
10. **Weak-Field Thermal Hall Conductivity in the Mixed State of d-Wave Superconductors.**
Adam C. Durst, Ashvin Vishwanath, Patrick A. Lee.
Phys. Rev. Lett. **90**, 187002 (2003).

11. **Screening and Dissipation at the Superconductor-Insulator Transition Induced by a Metallic Ground Plane.**
Ashvin Vishwanath, Joel E. Moore and T. Senthil.
Phys. Rev. B **69**, 054507 (2004).
12. **Emergent Photons and New Transitions in the O(3) Sigma Model with Hedgehog Suppression**
O. I. Motrunich and Ashvin Vishwanath,
Phys. Rev. B **70**, 075104 (2004).
13. **"Deconfined" Quantum Critical Points**
T. Senthil, Ashvin Vishwanath, Leon Balents, Subir Sachdev, M. P. A. Fisher
Science **303**,1490 (2004).
14. **Quantum Criticality and Deconfinement in Phase Transitions Between Valence Bond Solids**
Ashvin Vishwanath, L. Balents, T. Senthil
Phys. Rev. B **69**, 224416 (2004).
15. **Quantum Criticality Beyond the Landau-Ginzburg-Wilson Paradigm**
T. Senthil, Leon Balents, Subir Sachdev, Ashvin Vishwanath, M. P. A. Fisher
Phys. Rev. B **70**, 144407 (2004).
16. **Deconfined Criticality Critically Defined**
T. Senthil, Leon Balents, Subir Sachdev, Ashvin Vishwanath, M. P. A. Fisher
cond-mat/0404718. (Conference Proceedings, Sendai-2004).
17. **Extending Luttinger's Theorem to Z(2) Fractionalized Phases of Matter**
A. Paramekanti and Ashvin Vishwanath
Phys. Rev. B **70** 245118 (2004).
18. **Finite temperature properties of quantum Lifshitz transitions between valence bond solid phases: An example of 'local' quantum criticality**
P. Ghaemi, A. Vishwanath, and T. Senthil
Phys. Rev. B **72**, 024420 (2005).
19. **Dynamic projection on Feshbach molecules: a probe of pairing and phase fluctuations**
E. Altman and Ashvin Vishwanath
Phys. Rev. Lett. **95**, 110404 (2005).
20. **Supersolid Order from Disorder: Hard-Core Bosons on the Triangular Lattice**
R. Melko, A. Paramekanti, A. Burkov, A. Vishwanath, D. Sheng and L. Balents
Phys. Rev. Lett. **95**, 127207 (2005)
21. **Ordering near the percolation threshold in models of two dimensional interacting bosons with quenched dilution**
N. Bray-Ali, J. Moore, T. Senthil and A. Vishwanath
Phys. Rev. B. **73**, 064417 (2006)

22. **Theory of the helical spin crystal: a candidate for the partially ordered state of MnSi**
B. Binz, A. Vishwanath, and V. Aji
Phys. Rev. Lett. **96**, 207202 (2006).
23. **Spin Liquid States on the Triangular and Kagome Lattices: A Projective Symmetry Group Analysis of Schwinger Boson States**
Fa Wang and A. Vishwanath
Phys Rev. B. **74**, 174423 (2006)
24. **Current noise in the vicinity of the 2D superconductor-insulator quantum critical point**
A. G. Green, J. Moore, S. Sondhi and A. Vishwanath
Phys. Rev. Lett. **97**, 227003 (2006)
25. **Theoretical proposal predicting anomalous magnetoresistance and quadratic Hall effect in the partially ordered state of MnSi**
B. Binz and A. Vishwanath
J. Magn. Mater. **310**, 1062 (2007).
26. **Theory of helical spin crystals: phases, textures and properties**
B. Binz and A. Vishwanath
Phys Rev. B **74**, 214408 (2006).
27. **Thermoelectric transport near the pair breaking quantum phase transition out of a d-wave superconductor.**
D. Podolsky, A. Vishwanath, J. Moore and S. Sachdev
Phys. Rev. B **75**, 014520 (2007).
28. **Nematic Order by Disorder in Spin-2 BECs**
A. Turner, R. Barnett, E. Demler and Ashvin Vishwanath
Phys. Rev. Lett. **98**, 190404 (2007).
29. **Quantum and Classical Spins on the Spatially Distorted Kagome Lattice: Applications to Volborthite**
Fa Wang, Ashvin Vishwanath, Yong Baek Kim
Phys. Rev. B. **76**, 094421 (2007).
30. **Nernst effect and diamagnetism in phase fluctuating superconductors**
Daniel Podolsky, Srinivas Raghu, Ashvin Vishwanath
Phys. Rev. Lett. **99**, 117004 (2007)
31. **Spin phonon induced colinear order and magnetization plateaus in triangular and kagome antiferromagnets. Applications to CuFeO₂**
Fa Wang, Ashvin Vishwanath
Phys. Rev. Lett. **100**, 077201 (2008)
32. **Topological Hall effect in helical spin crystals**
B. Binz and Ashvin Vishwanath

Physica **B403**, 1336 (2008) [SCES'07 proceedings]

33. **Magnetization plateaus and sublattice ordering in easy axis Kagome lattice antiferromagnets**
Arnab Sen, Kedar Damle, Ashvin Vishwanath
Phys. Rev. Lett. **100**, 097202 (2008)
 34. **Topological spin liquid on the hyper-kagome lattice of $\text{Na}_4\text{Ir}_3\text{O}_8$**
Michael J. Lawler, Hae-Young Kee, Yong Baek Kim, Ashvin Vishwanath
Phys. Rev. Lett. **100**, 22720 (2008).
 35. **Noise Correlations in One-Dimensional Systems of Ultracold Fermions**
L. Mathey, E. Altman, and A. Vishwanath
Phys. Rev. Lett. **100**, 240401 (2008).
 36. **Spin-Charge Separated Solitons in a Topological Band Insulator**
HaeYing Ran, Ashvin Vishwanath, and Dung-Hai Lee
Phys. Rev. Lett. **101**, 086801 (2008).
-
- 1
37. **Novel Transitions in S=1 Spinor Condensates and XY Ashkin-Teller Universality**
Daniel Podolsky, Shailesh Chandrasekharan, Ashvin Vishwanath
cond-mat/0707.0695. Submitted to *Phys. Rev. Lett.*
 38. **A vortex dynamics approach to the Nernst effect in fluctuating superconductors**
S. Raghu, D. Podolsky, A. Vishwanath and David Huse
arXiv: 0801.2925. Submitted to *Phys. Rev. Lett.*
 39. **Comparative study of Higgs transition in one-component and two-component lattice superconductor models**
O. Motrunich and A. Vishwanath
arXiv: 0805.1494. Submitted to *Phys. Rev. B.*
 40. **A Numerical Renormalization Group Study of the Superconducting and Spin Density Wave Instabilities in $\text{MFeAsO}_{1-x}\text{F}_x$ Compounds**
Fa Wang, Hui Zhai, Ying Ran, Ashvin Vishwanath, Dung-Hai Lee
arXiv: 0805.3343.
 41. **Nodal Spin Density Wave and band topology of the FeAs based materials**
Ying Ran, Fa Wang, Hui Zhai, Ashvin Vishwanath, Dung-Hai Lee
arXiv: 0805.3535. Submitted to *Phys. Rev. B.*
 42. **A Z_2 spin-orbital liquid state in the square lattice Kugel-Khomskii model**
Fa Wang and A. Vishwanath
arXiv: 0806.1743. Submitted to *Phys. Rev. Lett.*

43. **A direct transition between a Neel ordered Mott insulator and a $d_{x^2-y^2}$ superconductor on the square lattice**
Ying Ran, Ashvin Vishwanath, Dung-Hai Lee
arXiv: 0806.2321. Submitted to *Phys. Rev.B*
44. **A Funtional Renormalization Group Study of the Pairing Symmetry and Pairing Mechanism of the FeAs Based High Temperature Superconductors**
Fa Wang, Hui Zhai, Ying Ran, Ashvin Vishwanath, Dung-Hai Lee
arXiv: 0807.0498. Submitted to *Phys. Rev. Lett.*
45. **Extended supersolid phase of frustrated hard-core bosons on a triangular lattice**
Fa Wang, Frank Pollmann, Ashvin Vishwanath
arXiv: 0809.1667. Submitted to *Phys. Rev. Lett.*