

Publications of Robert Konik

- R. M. Konik, **Excitonic Hierarchies in Gapped Carbon Nanotubes**, in press with Physical Review Letters.
- M. Kulkarni and R. M. Konik, **The RKKY Interaction and the Nature of the Ground State of Double Dots in Parallel**, submitted to Physical Review B.
- G. Brandino, R. M. Konik, and G. Mussardo, **Energy Level Distribution of Perturbed Conformal Field Theories**, J. Stat. Mech.-Theory and Experiment, P07013 (2010).
- F. H. L. Essler and R. M. Konik, **Finite-temperature Dynamical Correlations in Massive Integrable Quantum Field Theories**, J. Stat. Mech.-Theory and Experiment, P07013 (2009).
- R. M. Konik, T. M. Rice, and A. M. Tsvelik, **Superconductivity generated by coupling to a Cooperon in a 2-dimensional array of 4-leg Hubbard ladders**, Phys. Rev. B 82, 054501 (2010).
- R. M. Konik, Y. Adamov, **A Renormalization Group For Treating 2D Coupled Arrays of Continuum 1D Systems**, Phys. Rev. Lett., 102, 097203 (2009).
- F. Essler and R. M. Konik **Finite-temperature lineshapes in gapped quantum spin chains**, Phys. Rev. B Rapid Communications 78, 100403 (2008).
- R. M. Konik, F. Essler, and A. Tsvelik **Modelling magnetic fluctuations in the stripe ordered state** Phys. Rev. B 78, 214509 (2008).
- A. J. A. James, F. H. L. Essler, and R. M. Konik, **Finite-temperature dynamical structure factor of alternating Heisenberg chains** Phys. Rev. B 78, 094411 (2008).
- A. A. Gogolin, R. M. Konik, A.W.W. Ludwig, and H. Saleur **Counting Statistics for the Anderson Impurity Model: Bethe Ansatz and Fermi Liquid Study**, Ann. Phys. (Leipzig) 16, 678 (2007).
- R. M. Konik and T. M. Rice, **Orbital dependence of quasiparticle lifetimes in Sr_2RuO_4** , Phys. Rev. B 76, 104501 (2007).
- R. M. Konik, **Kondo Physics and Exact Solvability of Double Dots Systems**, Phys. Rev. Lett. 99, 076602 (2007).
- R. M. Konik and Y. Adamov, **Numerical Renormalization Group for Continuum One-Dimensional Systems**, Phys. Rev. Lett. 98, 147205 (2007).
- F. H. L. Essler and R. M. Konik, **Dynamical spin response of doped two-leg Hubbard-like ladders**, Phys. Rev. B 75, 144403 (2007).
- R. M. Konik, T. M. Rice, and A. Tsvelik, **Doped Spin Liquid: Luttinger Sum Rule and Low Temperature Order**, Phys. Rev. Lett. 96 (2006) 086407.
- B. Altshuler, R. M. Konik, and A. Tsvelik, **Low Temperature Correlation Functions in Integrable Models: Derivation of the Large Distance and Time Asymptotics from the Form Factor Expansion**, Nucl. Phys. B 739 (2006) 311.
- F. Essler and R. M. Konik, *Applications of Massive Integrable Quantum Field Theories to Problems in Condensed Matter Physics*, published in **From Fields to Strings: Circumnavigating Theoretical Physics** Ian Kogan Memorial Volume, eds. M. Shifman, A. Vainshtein, and J. Wheater, World Scientific Press, 2005.

U. Eichmann, T. F. Gallagher, and R. M. Konik, **Reply to comment on “Fano Lineshapes Revisited: Symmetric Photoionization Peaks from Pure Continuum Excitation” by J. W. Cooper, C. H. Greene, P. Langhoff, A. F. Starace, and C. Winstead**, Phys. Rev. Lett. 94, 229302 (2005).

R. M. Konik, **Fano Resonances in Quantum Dots: A Non-Perturbative Role for Potential Like Scattering**, cond-mat/0401617.

R. M. Konik, **Non-Perturbative Aspects of Fano Resonances in Quantum Dots: An Exact Treatment**, J. Stat. Mech (2004) L11001. of Statistical Physics.

U. Eichmann, T. F. Gallagher, and R. M. Konik, **Fano Lineshapes Revisited: Symmetric Photoionization Peaks from Pure Continuum Excitation**, Phys. Rev. Lett, 90, 233004 (2003).

R. M. Konik, **Haldane Gapped Spin Chains: Exact Low Temperature Expansions of Correlation Functions**, Phys. Rev. B. 68, 104435 (2003).

R. M. Konik and Paul Fendley **Haldane-Gapped Spin Chains as Luttinger Liquids: Correlation Functions at Finite Field**, Phys. Rev. B 66 (2002) 144416.

R. M. Konik, H. Saleur, and A.W.W. Ludwig, **Transport through Quantum Dots: Analytic Results from Integrability**, Phys. Rev. Lett. 87 (2001) 236801.

E. Kolomeisky, R. Konik, and Xiaoya Qi, **Quantum Fluctuations of Charge and Phase Transitions of a Large Coulomb-Blockaded Quantum Dot**, Phys. Rev. B 66, 075318 (2002).

R. M. Konik, H. Saleur, and A.W.W. Ludwig, **Computing the Conductance of Quantum Dots from the Integrability of the Anderson Model**, Phys. Rev. B 66 (2002) 125304.

P. Fendley and R. M. Konik, **Phase Transitions in Two-Dimensional Disordered Systems** Phys. Rev. B 62 9359 (2000).

R. M. Konik, A.W.W. Ludwig, and H. Saleur, **Symmetry Restoration: The Interplay of the Scaling Limit with the Renormalization Group**, Phys. Rev. B 66, 075105 (2002).

R. M. Konik and A.W.W. Ludwig, **Exact Zero Temperature Correlation Functions for Two-Leg Hubbard Ladders and Carbon Nanotubes**, Phys. Rev. B 64 155112 (2001).

R. M. Konik, F. Lesage, A.W.W. Ludwig, and H. Saleur, **Two-Leg Ladders and Carbon Nanotubes: Exact Properties at Finite Doping**, Phys. Rev. B 61, 4983 (2000).

R. M. Konik, A. LeClair, **Purely Transmitting Defect Field Theories**, *Nuclear Physics B* 538 (1999) 587.

R. M. Konik, A. LeClair, **The Scattering Theory of Oscillator Defects in Optical Fibers**, *Physical Review B* 58 (1998) 1872.

R. M. Konik, A. LeClair, **Short Distance Expansions of Correlation Functions in the sine-Gordon Model**, *Nuclear Physics B*, 479 (1996) 619.

R. M. Konik, A. LeClair, G. Mussardo, **On Ising Correlation Functions with Boundary Magnetic Field**, *International Journal of Modern Physics*, Vol. 11, No. 15, 1996, 2765.

M. Ameduri, R. M. Konik, A. LeClair, **Boundary sine-Gordon Interactions at the Free-Fermion Point**, *Physics Letters B*, 354 (1995) 376.

R. M. Konik, L. J. Lanzerotti, C. G. Maclennan, A. Wolfe, D. Venkatesan, **Cusp-Latitude Magnetic Impulse Events: 3. Associated Low-Latitude Signatures**, May 1995, *Journal of Geophysical Research*, *100*, 7731.

R. M. Konik, L. J. Lanzerotti, A. Wolfe, C. G. Maclennan, D. Venkatesan, **Cusp-Latitude Magnetic Impulse Events: 2. Prevailing Interplanetary and Solar Wind Conditions**, August 1994, *Journal of Geophysical Research*, *99*, 14831.

L. Lanzerotti, R. M. Konik, D. Venkatesan, C. G. Maclennan, **Cusp-Latitude Magnetic Impulse Events: 1. Occurrence Statistics**, August 1991, *Journal of Geophysical Research*, *96*, 14009.