

Publications:

Papers in refereed journals:

1. Droplet theory of low-dimensional Potts models.
B. Schmittmann,
Journal of Physics **A15**, 3571-3578 (1982).
2. Droplet theory for Ising-like systems: Two-loop results.
B. Schmittmann,
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3. Droplet theory in low dimensions: Potts models and percolation.
B. Schmittmann and A. D. Bruce,
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4. Field theory of long-time behaviour in driven diffusive systems.
H. K. Janssen and B. Schmittmann,
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5. Field theory of critical behaviour in driven diffusive systems.
H. K. Janssen and B. Schmittmann,
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6. Finite size scaling for directed percolation and related stochastic evolution processes.
H. K. Janssen, B. Schaub and B. Schmittmann,
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7. The general epidemic process in a finite environment.
H. K. Janssen, B. Schaub and B. Schmittmann,
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8. The effects of surfaces on directed percolation and related stochastic evolution processes.
H. K. Janssen, B. Schaub and B. Schmittmann,
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9. General two-point correlation functions for ring polymers using renormalisation group techniques.
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10. The dynamic scattering factor for linear and ring polymers in the long-wavelength limit.
B. Schaub and B. Schmittmann,
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11. The effects of surfaces on dynamic percolation.
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12. The effects of pollution on critical population dynamics.
R. Kree, B. Schaub and B. Schmittmann,
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13. New universal short-time scaling behaviour of critical relaxation.
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14. Phase transitions in a driven lattice gas with repulsive interactions.
K.-t. Leung, B. Schmittmann and R. K. P. Zia,
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15. Critical properties of a randomly driven diffusive system.
B. Schmittmann and R.K.P. Zia,
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16. Finger formation in a driven diffusive system,
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17. Three-point correlations in driven diffusive systems with Ising symmetry.
K. Hwang, B. Schmittmann and R.K.P. Zia,
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18. Onset of spatial structures in biased diffusion of two species.
B. Schmittmann, K. Hwang and R.K.P. Zia,
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19. Three-point correlation functions in uniformly and randomly driven diffusive systems.
K. Hwang, B. Schmittmann and R.K.P. Zia,
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20. Fixed point Hamiltonian for a randomly driven diffusive system.
B. Schmittmann,
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21. Spatial structures with nonzero winding number in biased diffusion of two species.
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22. Renormalization group study of a hybrid driven diffusive system.
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23. Spontaneous structure formation in driven systems with two species:
Exact solutions in a mean-field theory.
I. Vilfan, R.K.P. Zia, and B. Schmittmann,
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24. Critical dynamics of non-conserved Ising-like systems.
K.E. Bassler and B. Schmittmann,
Physical Review Letters **73**, 3343-3346 (1994).
25. On singularities in the disordered phase of a driven diffusive system.
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26. Novel phase transitions in biased diffusion of two species.
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27. Phase transitions in driven bi-layer systems: A Monte Carlo study.
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28. Frozen disorder in a driven system.
B. Schmittmann and K.E. Bassler,
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29. Nonequilibrium phase transitions in a simple three-state lattice gas.
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30. Novel quenched disorder fixed point in a two-temperature lattice gas
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31. Asymmetries in structure factor histograms.
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36. Two point correlations and critical line of the driven Ising lattice gas in a high temperature expansion.
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38. Biased diffusion with correlated noise.
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39. Phase transitions in a driven lattice gas with anisotropic interactions.
L.B. Shaw, B. Schmittmann and R. K. P. Zia
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40. "Weather" records: Musings on cold days after a long hot Indian summer.
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41. Field-induced vacancy localization in a driven lattice gas: Scaling of steady states.
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42. Universal aspects of vacancy-mediated disordering dynamics: The effect of external fields.
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43. Possible existence of an extraordinary phase in the driven lattice gas.
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49. Vacancy-mediated domain growth in a driven lattice gas.
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50. Nonequilibrium stationary state of a two-temperature spin chain.
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51. Phase diagram of a driven interacting three-state lattice gas.
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56. High temperature expansion for a driven bilayer system.
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57. Effects of differential mobility on biased diffusion of two species.
R.S. Hipolito, R.K.P. Zia and B. Schmittmann
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58. Driven diffusive systems: How steady states depend on dynamics.
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60. Complete solution of the kinetics in a far-from-equilibrium Ising chain.

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 66. Spurious phase in a model for traffic on a bridge.
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 67. Cluster growth and dynamic scaling in a two-lane driven diffusive system
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73. Simulation studies of permeation through two-dimensional ideal polymer networks
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82. Critical behavior of the driven diffusive lattice gas
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92. A nonequilibrium lattice gas of two species: Monte Carlo investigations.
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Others:

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99. Invited to review software package: "Thermal and Statistical Physics",
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100. Invited to write book review of "Nonequilibrium Statistical Mechanics in One
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