

**LIST OF PUBLICATIONS**

(May 30, 2018)

- [1] S. Bachmann, A. Bols, W. De Roeck, and M. Fraas. Quantization of conductance in gapped interacting systems. *Annales Henri Poincaré*, 19, 2018.
- [2] S. Bachmann, W. De Roeck, and M. Fraas. The adiabatic theorem and linear response theory for extended quantum systems. *To appear in Communications in Mathematical Physics, preprint math-ph/1705.02838*, 2017.
- [3] S. Bachmann, W. De Roeck, and M. Fraas. Adiabatic theorem for quantum spin systems. *Physical Review Letters*, 119(6):060201, 2017.
- [4] S. Bachmann. Local disorder, topological ground state degeneracy and entanglement entropy, and discrete anyons. *Reviews in Mathematical Physics*, 29(6):1750018, 2017.
- [5] S. Bachmann and A. Bluhm. Local factorisation of the dynamics of quantum spin systems. *Journal of Mathematical Physics*, 58:071901, 2017.
- [6] S. Bachmann and F. Genoud. Mean-field limit and phase transitions for nematic liquid crystals in the continuum. *Journal of Statistical Physics*, 168(4):1–28, 2017.
- [7] S. Bachmann, M. Fraas, and G.M. Graf. Dynamical crossing of an infinitely degenerate critical point. *Annales Henri Poincaré*, 18(5):1755–1776, 2017.
- [8] S. Bachmann, W. Dybalski, and P. Naaijken. Lieb–Robinson bounds, Arveson spectrum and Haag–Ruelle scattering theory for gapped quantum spin systems. *Annales Henri Poincaré*, 17:1737–1791, 2016.
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- [14] S. Bachmann, M. Butz, and W. De Roeck. Disordered quantum wires: Microscopic origins of the DMPK theory and Ohm’s law. *Journal of Statistical Physics*, 148:164–189, 2012.
- [15] S. Bachmann and B. Nachtergaele. Product vacua with boundary states. *Physical Review B*, 86:035149, Jul 2012.

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- [17] S. Bachmann, S. Michalakis, B. Nachtergaele, and R. Sims. Automorphic equivalence within gapped phases of quantum lattice systems. *Communications in Mathematical Physics*, 309(3):835–871, 2012.
- [18] S. Bachmann and W. De Roeck. From the Anderson model on a strip to the DMPK equation and random matrix theory. *Journal of Statistical Physics*, 139(4):541–564, 2010.
- [19] S. Bachmann, G.M. Graf, and G.B. Lesovik. Time ordering and counting statistics. *Journal of Statistical Physics*, 138:333–350, 2009.
- [20] J.E. Avron, S. Bachmann, G.M. Graf, and I. Klich. Fredholm determinants and the statistics of charge transport. *Communications in Mathematical Physics*, 280(3):807–829, 2008.
- [21] S. Bachmann and G.M. Graf. Charge transport and determinants. In I. Beltita, G. Nenciu, and R. Purice, editors, *Mathematical results in Quantum mechanics*, 2008.
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