

## LIST OF PUBLICATIONS

(May 26, 2022)

- [1] S. Bachmann, W. De Roeck, M. Fraas, and T. Jappens. A classification of  $G$ -charge Thouless pumps in 1D invertible states. *arXiv preprint arXiv:2204.03763*, 2022.
- [2] C. Zhang, M. Levin, and S. Bachmann. Vanishing Hall conductance for commuting Hamiltonians. *Physical Review B*, 105(8):L081103, 2022.
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- [4] S. Bachmann and M. Lange. Trotter product formulae for \*-automorphisms of quantum lattice systems. *To appear in Annales Henri Poincaré*, *arXiv preprint arXiv:2105.14168*, 2021.
- [5] S. Bachmann, W. De Roeck, M. Fraas, and M. Lange. Exactness of linear response in the quantum Hall effect. *Annales Henri Poincaré*, 22:1113–1132, 2021.
- [6] S. Bachmann, A. Bols, W. De Roeck, and M. Fraas. Rational indices for quantum ground state sectors. *Journal of Mathematical Physics*, 62:011901, 2021.
- [7] S. Bachmann and M. Fraas. On the absence of stationary currents. *Reviews in Mathematical Physics*, 32:2060011, 2020.
- [8] S. Bachmann, A. Bols, W. De Roeck, and M. Fraas. A many-body index for quantum charge transport. *Communications in Mathematical Physics*, 375:1249–1272, 2020.
- [9] S. Bachmann, A. Bols, W. De Roeck, and M. Fraas. Many-body Fredholm index for ground-state spaces and Abelian anyons. *Physical Review B*, 101:085138, 2020.
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- [14] S. Bachmann, W. De Roeck, and M. Fraas. The adiabatic theorem and linear response theory for extended quantum systems. *Communications in Mathematical Physics*, 361(3):997–1027, 2018.
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- [16] S. Bachmann. Local disorder, topological ground state degeneracy and entanglement entropy, and discrete anyons. *Reviews in Mathematical Physics*, 29(6):1750018, 2017.

- [17] S. Bachmann and A. Bluhm. Local factorisation of the dynamics of quantum spin systems. *Journal of Mathematical Physics*, 58:071901, 2017.
- [18] 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.
- [19] S. Bachmann, M. Fraas, and G.M. Graf. Dynamical crossing of an infinitely degenerate critical point. *Annales Henri Poincaré*, 18(5):1755–1776, 2017.
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