

STEFANO OLLA - PUBLICATIONS LIST

- Books



- (1) *Fluctuations in Markov Processes, martingale approximation and time symmetry*, with T. Komorowski and C. Landim, **Grundlehren der mathematischen Wissenschaften 345**, Springer, August 31, 2012.

- Publications in international journals:

- (1) P. Ferrari, S.Olla, *Macroscopic diffusive fluctuations for generalized hard rods dynamics*, 2023, <https://doi.org/10.48550/arXiv.2305.13037>, to appear in **Ann.Appl.Prob.**
- (2) P. Garrido, T. Komorowski, J. Lebowitz, S. Olla, *On the behaviour of a periodically forced and thermostatted harmonic chains*, **J. Stat. Phys.**, 2024, 191:30, <https://doi.org/10.1007/s10955-024-03243-6>
- (3) C. Bernardin, P. Gonçalvez, S. Olla, *Space-time fluctuations in a quasi-static limit*, **Mathematical Physics, Analysis and Geometry**, 2024, 27:7, <https://doi.org/10.1007/s11040-023-09474-5>, <http://arxiv.org/abs/2305.05319>
- (4) T. Komorowski, J. L., Lebowitz, S. Olla, M. Simon, *On the Conversion of Work into Heat: Microscopic Models and Macroscopic Equations*, **Ensaios Matemáticos**, 2023, 38, 325-341, <https://www.doi.org/10.21711/217504322023/em3812>
- (5) T. Komorowski, J.L. Lebowitz, S. Olla, *Heat flow in a periodically forced, thermostatted chain II*, **J. Stat. Phys.**, 2023, 190 (4), pp.87. <https://doi.org/10.1007/s10955-023-03103-9>
- (6) T. Komorowski, J.L. Lebowitz, S. Olla, *Heat flow in a periodically forced, thermostatted chain*, **Comm.Math.Phys.**, 400, 2181–2225 (2023), <https://doi.org/10.1007/s00220-023-04654-4>
- (7) Amirali Hannani, Stefano Olla, *A stochastic thermalization of the Discrete Nonlinear Schrödinger Equation*, **Stoch PDE: Anal Comp**, 2022, <https://doi.org/10.1007/s40072-022-00263-9>, <http://arxiv.org/abs/2109.01389>
- (8) Anna De Masi, Stefano Marchesani, Stefano Olla, Lu Xu, *Quasi-static limit for the asymmetric simple exclusion*, **Prob.Th. Rel. Fields**, 2022. <https://doi.org/10.1007/s00440-022-01140-1>, <http://arxiv.org/abs/2103.08019>
- (9) Tomasz Komorowski, Stefano Olla, *Asymptotic Scattering by Poissonian Thermostats*, **Ann. Henri Poincaré** 23, 3753–3790 (2022), <https://doi.org/10.1007/s00023-022-01173-1>, <http://arxiv.org/abs/2101.04360>
- (10) Stefano Marchesani, Stefano Olla, Lu Xu, *Quasi-static limit for a Hyperbolic Conservation Law*, **Nonlinear Differential Equations and Applications**, 2021, 28 (53), <https://doi.org/10.1007/s00030-021-00716-5>

- (11) A. Iacobucci, S. Olla, G. Stoltz, *Thermo-mechanical transport in rotor chains*, **J. Stat.Phys.**, 183, n. 26, 2021. <https://doi.org/10.1007/s10955-021-02748-8>
- (12) T. Komorowski, S. Olla, M. Simon. *Hydrodynamic limit for a chain with thermal and mechanical boundary forces*. **Electronic Journal of Probability**, 26, 1-49, 2021. <https://doi.org/10.1214/21-EJP581>
- (13) T. Komorowski, S. Olla, *Kinetic limit for a chain of harmonic oscillators with a point Langevin thermostat*, **J. Funct. Anal.**, 279, n.12, 108764, 2020 <https://doi.org/10.1016/j.jfa.2020.108764>
- (14) S. Marchesani, S. Olla, *On the existence of L^2 -valued thermodynamic entropy solutions for a hyperbolic system with boundary conditions*, **Comm. Partial Diff. Eq.**, 45, n. 9, 1072–1087 (2020), <https://doi.org/10.1080/03605302.2020.1750426>.
- (15) W De Roech, F. Huveneers, S. Olla, *Subdiffusion in one-dimensional Hamiltonian chains with sparse interactions*, **J. Stat. Phys.**, 180, 678–698, (2020) <https://doi.org/10.1007/s10955-020-02496-1>
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- (34) T. Komorowski, S. Olla, *Diffusive propagation of energy in a non-acoustic chain*, **Arch.Ration.Mech.Anal.**, **223**, N.1, 95-139 (2017), <https://doi.org/10.1007/s00205-016-1032-9>.
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- Publications in National Journals:

- (1) C. Landim, S. Olla and S.B. Volchan, *Driven Tracer and Einstein Relation in One-Dimensional Symmetric Simple Exclusion*, **Resenhas do Instituto de Matematica e Estatistica da Universidade de Sao Paulo**, vol.3, N.2, 173-209, 1997. <https://www.revistas.usp.br/resenhasimeusp/article/view/74871>
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- Proceedings of conferences

- (1) T. Komorowski, S. Olla, *Thermal Boundaries in Kinetic and Hydrodynamic Limits*, in "Recent advances in kinetic equations and applications", F. Salvarani ed., **Springer INdAM Series** **48**, 2021, pp 253–288, ISSN 2281-518X, ISBN 978-3-030-82945-2, https://doi.org/10.1007/978-3-030-82946-9_11
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