

LPTM - Preprints

Année	Auteur(s)	Titre article	Revue	Archivage	Thème
2025	ALEXANDER G.P. , KOLE S.J. , MAITRA A. , RAMASWAMY S.	Screw Symmetry, Chiral Hydrodynamics and Odd Instability in Active Cholesterics		(arXiv:2508.00684)	D
2025	ANGULO-GARCIA D. , TORCINI A.	A theory for self-sustained balanced states in absence of strong external currents		(arXiv:2510.17492)	D
2025	BAILLOU R. , PEDROSA M. , GUIGUE Q. , MEINIER S. , DARNIGE T. , PERUANI F. , CLEMENT E.	Confinement controls bacterial spreading at all scales		(arXiv:2503.11364)	D
2025	BALLESTEROS FERRAZ L.	Dynamical discontinuities in repeated weak measurements revealed by complex weak values		(arXiv:2511.03352)	A
2025	BALLESTEROS FERRAZ L. , ELOUARD C.	Weak continuous measurements require more work than strong ones		(arXiv:2502.09732)	A
2025	BALLESTEROS FERRAZ L. , MATZKIN A. , KUMAR PAN A.	Temperature-induced measurement sensitivity enhancement via imaginary weak values		(arXiv:2405.18475)	A
2025	BRIGATTI E. , PERUANI F.	Metamorphosis of collective patterns modulated by non-reciprocal interactions		(arXiv:2505.02672)	D
2025	COSTA J. , RIBEIRO P. , DE LUCA A.	Emergence of universality in transport of noisy free fermions		(arXiv:2504.00188)	B/C
2025	DAEM F. , DURT T. , MATKIN A.	Trajectories in coupled waveguides: an application to a recent experiment and Hiley's lessons on the falsification of the Bohmian model		(arXiv:2510.21504)	A
2025	DIEP H.T. , NGO V.T.	Is the hyperscaling relation violated below the upper critical dimension in some particular cases?		(arXiv:2507.02159)	A
2025	DOWLING N. , DE NARDIS J. , HEINRICH M. , TURKESHI X. , PAPPALARDI S.	Free Independence and Unitary Design from Random Matrix Product Unitaries		(arXiv:2508.00051)	B/C
2025	DUTTA S. , SAHA A.	Stochastic Heat Engine Using a Single Brownian Ellipsoid		(arXiv:2505.17313)	D
2025	HUBNER F. , BIAGETTI L. , DE NARDIS J. , DOYON B.	Diffusive hydrodynamics of hard rods from microscopics		(arXiv:2503.07794)	A
2025	KANT R. , MAITRA A. , SOOD A.K. , RAMASWAMY S.	Edge states, pairing, and sorting of motile chiral particles		(arXiv:2509.00729)	D
2025	KETHEPALLI J. , URILYON A. , SADHU T. , DE NARDIS J.	Ballistic macroscopic fluctuation theory via mapping to point particles		(arXiv:2505.18093)	D
2025	KHODAEVA U.E. , KOVRIZHIN D. , KNOLLE J.	Quantum critical dynamical response of the twisted Kitaev spin chain		(arXiv:2506.18766)	A
2025	LA MONTAGNA G.M. , BUREKOVIC S. , MAITRA A. , NARDINI C.	Eppur si muove: Shape of topological defects -- and consequent motion -- in active nematics		(arXiv:2504.19665)	D
2025	LAMI G. , DE LUCA A. , TURKESHI X. , DE NARDIS J.	Quantum State Design and Emergent Confinement Mechanism in Measured Tensor Network States		(arXiv:2504.16995)	B/C
2025	LOIO H. , LAMI G. , LEONE L. , MCGINLEY M. , TURKESHI X. , DE NARDIS J.	Quantum State Designs via Magic Teleportation		(arXiv:2510.13950)	B/C
2025	MAITRA A. , JENTSCH P. , CHEN L. , FAN LEE C. , TONER J. , RAMASWAMY S.	The inconvenient truth about flocks		(arXiv:2503.17064)	D
2025	MESPLE F. , MALLET P. , TRAMBLAY DE LAISSARDIERE G. , DUTREIX C. , LAPERTOT G. , VEUILLEN J-Y. , RENARD V.T.	Experimental evidence of the topological obstruction in twisted bilayer graphene		(arxiv:2506.08913)	A
2025	PAPOULAR D.	Measuring the dynamics of an XXZ quantum simulator and controlling collapse through symmetries		(arXiv:2508.02468)	A
2025	PAVIGLIANTINI A. , LUMIA L. , TIRRITO E. , LAMI G. , SILVA A. , TURKESHI X. , GUGLIELMO L.	Emergence of Generic Entanglement Structure in Doped Matchgate Circuits		(arXiv:2507.12526)	B/C
2025	ROSE F. , RANCON A. , BALOG I.	Constraint effective action and critical correlation functions at fixed magnetization		(arXiv:2509.05195)	A
2025	SAULIERE A. , LAMI G. , BOYER C. , DE NARDIS J. , DE LUCA A.	Universality in the Anticoncentration of Noisy Quantum Circuits at Finite Depths		(arXiv:2508.14975)	B/C
2025	SOKOLOVSKI D. , MATZKIN A.	Wave packets, "negative times" and the elephant in the room		(arXiv:1602.07921)	A

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2025	TIRRITO E., LUMIA L., PAVIGLIANITI A., LAMI G., SILVA A., TURKESHI X., COLLURA M.	Magic phase transitions in monitored gaussian fermions		(arXiv:2507.07179)	B/C
2025	TIJIDRE F., MONGILLO G., TORCINI A.	Is the cortical dynamics ergodic? A numerical study in partially symmetric networks of spiking neurons		(arXiv:2508.04354)	D
2025	TRUONG T.T.	Inversion of the fixed radius Spherical Mean Radon Transform of F. John in $R^{2,3}$			B/C
2025	URILYON A., BIAGETTI L., KETHEPALLI J., DE NARDIS J.	Simulating generalised fluids via interacting wave packets evolution		(arXiv:2505.21000)	A
2025	ZUMER B., DAEM F., MATZKIN A.	Revivals and quantum carpets for the relativistic Schrödinger equation		(arXiv:2511.05200)	A
2024	BIAGETTI L., LEBEK M., PANFIL M., DE NARDIS J.	Generalised BBGKY hierarchy for near-integrable dynamics		(arXiv:2408.00593)	B/C
2024	CHRISTOPOULOS A., SANTINI A., GIACHETTI G.	Cahier de l'Institut Pascal: Noisy Quantum Dynamics and Measurement-Induced Phase Transitions	To appear on Cahier de l'Institut Pascal	(arXiv:2409.06310)	B/C
2024	COLLURA M., DE NARDIS J., ALBA V., LAMI G.	The quantum magic of fermionic Gaussian states		(arXiv:2412.05367)	A
2024	GUTIERREZ DE LA CAL X., ALKHATEEB M., PONS M., MATZKIN A., SOKOLOVSKI D.	Quantum statistical effects in one-particle densities: scattering and pair production		(arXiv:2407.13905)	A
2024	HALIMEH J.C., KHODAEVA U.E., KOVRIZHIN D.L., MOESSNER R., KNOLLE J.	Disorder-Free Localization for Benchmarking Quantum Computers		(arXiv:2410.08268)	A
2024	KOVRIZHIN D., et al	Observation of disorder-free localization and efficient disorder averaging on a quantum processor		(arXiv:2410.06557)	A
2024	MAITRA A., et al	Aging and freezing of active nematic dynamics of cancer-associated fibroblasts by fibronectin matrix remodeling	(DOI: 10.1101/2023.11.22.568216)	(bioRxiv (2023))	D
2024	MATO G., POLITI A., TORCINI A.	Chaotic synchronization in adaptive networks of pulse-coupled oscillators		(arXiv:2407.08453)	D
2024	SHARIPOV R., TIUTIAKINA A., GORSKY A., GRITSEV V., POLKOVNIKOV A.	Hilbert space geometry and quantum chaos		(arXiv:2411.11968)	B/C
2024	WANG Z., MCCARTY P., DANKOVA D., HONECKER A., WIETEK A.	Anomalous thermal broadening in the Shastry-Sutherland model and $\text{SrCu}_2(\text{BO}_3)_2$		(arXiv:2405.18475)	A
2023	DE LUCA A., GIACHETTI G.	Elusive phase transition in the replica limit of monitored systems		(arXiv:2306.12166)	A
2023	KOLE S. J., ALEXANDER G.P., MAITRA A., RAMASWAMY S.	Dynamics of Ordered Active Columns: Flows, Twists, and Waves		(arXiv:2306.03695)	D
2022	DUPREY Q., MATZKIN A.	Comment on "Does the weak trace show the past of a quantum particle?"		(arXiv:2202.11574)	A
2022	KOIBUCHI H., KATO F., EL HOG S., DIGUET G., DUCHARNE B., UCHIMOTO T., DIEP H.T.	Effect of Geometric Confinement on the Stabilization of Skyrmions.		(arXiv:2208.03847)	A
2020	NARAYAN SAHOO S., HOME D., MATZKIN A., SINHA U.	Comment on "Observing the "quantum Cheshire cat" effect with noninvasive weak measurement".		(arXiv:2006.00792)	A
2020	TARPAU C., CEBEIRO J., NGUYEN M.K., ROLLET G., DUMAS L.	On the design of a CST system and its extension to a bi-imaging modality.		(arXiv:2007.02750)	B
2016	CANTINI L.	Inhomogenous Multispecies TASEP on a ring with spectral parameters.		(arXiv:1602.07921)	B