

LPTM - Preprints

Année	Auteur(s)	Titre article	Revue	Archivage	Thème
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., ELOUARD C.	Weak continuous measurements require more work than strong ones		(arXiv:2502.09732)	A
2025	BALLU M., YAO Z., MIRMAND B., PAPOULARD D., PERRIN H., PERRIN A.	Microwave spectroscopy of ultracold sodium least-bound molecular states		(arXiv:2503.20330)	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., MATZKIN A.	Effects of superradiance on relativistic Foldy-Wouthuysen densities		(arXiv:2503.21404)	A
2025	DUTTA S., SAHA A.	Stochastic Heat Engine Using a Single Brownian Ellipsoid		(arXiv:2505.17313)	D
2025	GERBINO F., GIACHETTI P., DE LUCA A.	Measurement-Induced Phase Transition in State Estimation of Chaotic Systems and the Directed Polymer		(arXiv:2501.00547)	B/C
2025	GOLDOBIN D.S., AGEEVA M.V., DI VOLO M., TIXIDRE F., TORCINI A.	Synaptic shot-noise triggers fast and slow global oscillations in balanced neural networks		(arXiv:2505.22373)	D
2025	HUBNER F., BIAGETTI L., DE NARDIS J., DOYON B.	Diffusive hydrodynamics of hard rods from microscopics		(arXiv:2503.07794)	A
2025	KETHEPALLI J., URTILYON 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	LOTO H., CECILE G., GOPALAKRISHNAN S, LAMI G., DE NARDIS J.	Correlations, Spectra and Entanglement Transitions in Ensembles of Matrix Product States	Accepted Phys Rev B (2025)	(arXiv:2412.14261)	B/C
2025	MAGNI B., CHRISTOPOULOS A., DE LUCA A., TURKESHI X.	Anticoncentration in Clifford Circuits and Beyond: From Random Tensor Networks to Pseudo-Magic States		(arXiv:2502.20455)	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., TRAMBLY 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	POPOLI P., MAITRA A., RAMASWAMY S.	Don't look back: Ordering and defect cloaking in non-reciprocal lattice XY models		(arXiv:2503.06480)	D
2025	SAULIERE A., MAGNI B., LAMI G., TURKESHI X., DE NARDIS J.	Universality in the Anticoncentration of Chaotic Quantum Circuits		(arXiv:2503.00119)	B/C
2025	TRAMBLY DE LAISSARDIERE G., et al	Electronic structure and transport in materials with flat bands: 2D materials and quasicrystals		(arXiv:2506.06721)	A
2025	TRUONG T.T.	Inversion of the fixed radius Spherical Mean Radon Transform of F. John in $\mathbb{R}^{2,3}$			B/C
2025	URILYON A., BIAGETTI L., KETHEPALLI J., DE NARDIS J.	Simulating generalised fluids via interacting wave packets evolution		(arXiv:2505.21000)	A
2024	BIAGETTI L., LEBEK M., PANFIL M., DE NARDIS J.	Generalised BBGKY hierarchy for near-integrable dynamics		(arXiv:2408.00593)	B/C
2024	CANTINI L., ZAHRA A.	Single impurity in the Totally Asymmetric Simple Exclusion Process		(arXiv:2411.08480)	B/C
2024	CHRISTOPOULOS A., CHAN A., DE LUCA A.	Universal distributions of overlaps from unitary dynamics in generic quantum many-body systems		(arXiv:2404.10057)	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

LPTM - Preprints

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	PAVIGLIANTINI A., LAMI G., COLLURA M., SILVA A.	Estimating Non-Stabilizerness Dynamics Without Simulating It		(arXiv:2405.06054)	B/C
2024	PERUANI F. et al	The 2024 Motile Active Matter Roadmap		(arXiv:2411.19783)	D
2024	ROUZAIRE Y., RAHMANI P., PAGONABARRAGA I., PERUANI F., LEVIS D.	Activity leads to topological phase transition in 2D populations of heterogeneous oscillators		(arXiv:2407.19603)	D
2024	SHARIPOV R., TIUTIAKINA A., GORSKY A., GRITSEV V., POLKOVNIKOV A.	Hilbert space geometry and quantum chaos		(arXiv:2411.11968)	B/C
2024	TURKESHI X., CALABRESE P., DE LUCA A.	Quantum Mpemba Effect in Random Circuits		(arXiv:2405.14514)	B/C
2024	WANG Z., MCCARTY P., DANKOVA D., HONECKER A., WIETEK A.	Anomalous thermal broadening in the Shastry-Sutherland model and SrCu ₂ (BO ₃) ₂		(arXiv:2405.18475)	A
2024	WANG Z., MCCARTY P., DANKOVA D., HONECKER A., WIETEK A.	Spectroscopy and complex-time correlations using minimally entangled typical thermal states		(arXiv:2405.18484)	A
2023	DE LUCA A., GIACHETTI G.	Elusive phase transition in the replica limit of monitored systems		(arXiv:2306.12166)	A
2023	DE LUCA A., LIU C., NAHUM A., ZHOU T.	Universality classes for purification in nonunitary quantum processes		(arXiv:2312.17744)	B/C
2023	KOLE S. J., ALEXANDER G.P., MAITRA A., RAMASWAMY S.	Dynamics of Ordered Active Columns: Flows, Twists, and Waves		(arXiv:2306.03695)	D
2023	PERUANI F., CHAUDHURI D.	Active stop and go motion: a strategy to improve spatial exploration?		(arXiv:2306.05647)	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