

LPTM - Preprints

Année	Auteur(s)	Titre article	Revue	Archivage	Thème
2026	<b>ALSPAUGH D.J., FRATINO L., GHAZIKHANIAN N., SCHULLER I.K., ROZENBERG M.</b>	Disorder-driven stochastic dynamics in Mott resistive-switching systems		(arXiv:2602.14173)	A
2026	<b>CHARNAY E., ESCOUBET A., COPIE F., RANDOUX S., BONNEMAIN T., BASTIANELLO A., SURET P.</b>	Experimental observation of ballistic correlations in integrable turbulence		(arXiv:2601.21085)	
2026	<b>FUJI Y., CAPPONI S., DEVOS L., LECHÉMINANT P.</b>	Phase transitions in coupled Ising chains and SO(N)-symmetric spin chains		(arXiv:2602.17029)	A
2026	<b>GAUR M., SAHA A., PAUL S.</b>	From Global Flocking to Local Clustering: Interplay between Velocity Alignment and Visual Perception of Active Particles		(arXiv:2602.21338)	D
2026	<b>HONECKER A., ZHITOMIRSKY M.E., WIETEK A., RICHTER J.</b>	Field-induced states and thermodynamics of the frustrated Heisenberg antiferromagnet on a square lattice		(arXiv:2601.14380)	A
2026	<b>KARLOVA K., RUFINO A., VERKHOLYAK T., CACI N., WESSEL S., STRECKA J., MILA F., HONECKER A.</b>	Approaching Kasteleyn transition in frustrated quantum Heisenberg antiferromagnets		(arXiv:2601.14382)	A
2026	<b>LOTO H., DE NARDIS J., JIN T.</b>	Quantum-to-Classical Computability Transition via Negative Markov Chains		(arXiv:2604.19889)	B/C
2026	<b>PERRIER R., HERNANDEZ L., ALVAREZ-HAMELIN J.I., BEIROS M.G., KOTZINOS D.</b>	Synchronization between media followers and political supporters during an election process: towards a real time study		(arXiv:2503.05552)	D
2026	<b>SAHA S., KETHEPALLI J., GUISELIN B., DE NARDIS J., SADHU T.</b>	Universal tracer statistics in single-file transport		(arXiv:2604.24741)	B/C
2026	<b>SAULIERE A., LAMI G., RIBEIRO P., DE LUCA A., DE NARDIS J.</b>	Error-Correction Transitions in Finite-Depth Quantum Channels		(arXiv:2603.20369)	B/C
2026	<b>SYGA S., RAY C.G., NAVASEDENO J.M., PERUANI F., DEUTSCH A.</b>	Minority-Triggered Reorientations Yield Macroscopic Cascades and Enhanced Responsiveness in Swarms		(arXiv:2603.07254)	D
2026	<b>URILYON A., VASSEUR R., GOPALAKRISHNAN S., DE NARDIS J.</b>	Anomalous Diffusion and Superdiffusion in Integrable Spin Chains via a Hard-Rod Gas Mapping		(arXiv:2603.02171)	B/C
2025	<b>AVAN J., FRAPPAT L., RAGOUCY E.</b>	Quadratic Poisson brackets for the Camassa--Holm peakons		(arXiv:2512.11066)	B/C
2025	<b>BAILLOU R., PEDROSA M., GUIGUE Q., MEINIER S., DARNIGE T., PERUANI F., CLEMENT E.</b>	Confinement controls bacterial spreading at all scales		(arXiv:2503.11364)	D
2025	<b>BALLESTEROS FERRAZ L.</b>	Dynamical discontinuities in repeated weak measurements revealed by complex weak values		(arXiv:2511.03352)	A
2025	<b>BALLESTEROS FERRAZ L., ELOUARD C.</b>	Weak continuous measurements require more work than strong ones		(arXiv:2502.09732)	A
2025	<b>BALLESTEROS FERRAZ L., MATZKIN A., KUMAR PAN A.</b>	Temperature-induced measurement sensitivity enhancement via imaginary weak values		(arXiv:2509.04048)	A
2025	<b>BRIOZZO G., SIBONA G.J., PERUANI F.</b>	Resource and population dynamics in an agent-environment interaction model		(arXiv:2512.08762)	D
2025	<b>COSTA J., RIBEIRO P., DE LUCA A.</b>	Emergence of universality in transport of noisy free fermions		(arXiv:2504.00188)	B/C
2025	<b>CRAPS B., EVNIN O., KOVRIZHIN D., PASCUZZI G.</b>	Unified theory of local integrals of motion		(arXiv:2512.09595)	A
2025	<b>DAEM F., DURT T., MATKIN A.</b>	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	<b>DOWLING N., DE NARDIS J., HEINRICH M., TURKESHI X., PAPPALARDI S.</b>	Free Independence and Unitary Design from Random Matrix Product Unitaries		(arXiv:2508.00051)	B/C
2025	<b>DUTTA S., SAHA A.</b>	Stochastic Heat Engine Using a Single Brownian Ellipsoid		(arXiv:2505.17313)	D

LPTM - Preprints

2025	<b>GHAZIKHANIAN N., ALSPAUGH D.J., SALEV P., FRATINO L., ROZENBERG M.J., SCHULLER I.K.</b>	Enhanced stochasticity in irradiated vanadium oxide oscillators		(arXiv:2407.13905)	A
2025	<b>KANT R., MAITRA A., SOOD A.K., RAMASWAMY S.</b>	Edge states, pairing, and sorting of motile chiral particles		(arXiv:2509.00729)	D
2025	<b>KETHEPALI J., URILYON A., SADHU T., DE NARDIS J.</b>	Ballistic macroscopic fluctuation theory via mapping to point particles		(arXiv:2505.18093)	D
2025	<b>LA MONTAGNA G.M., BUREKOVIC S., MAITRA A., NARDINI C.</b>	Eppur si muove: Shape of topological defects -- and consequent motion -- in active nematics		(arXiv:2504.19665)	D
2025	<b>LAMI G., DE LUCA A., TURKESHI X., DE NARDIS J.</b>	Quantum State Design and Emergent Confinement Mechanism in Measured Tensor Network States		(arXiv:2504.16995)	B/C
2025	<b>LOTO H., LAMI G., LEONE L., MCGINLEY M., TURKESHI X., DE NARDIS J.</b>	Quantum State Designs via Magic Teleportation		(arXiv:2510.13950)	B/C
2025	<b>LUCAS M., RALCO A., HONECKER A., TRAMBLI DE LAISSARDIERE G.</b>	Tetrahedral Core in a Sea of Competing Magnetic Phases in Graphene		(arXiv:2511.22714)	A
2025	<b>MAITRA A., JENTSCH P., CHEN L., FAN LEE C., TONER J., RAMASWAMY S.</b>	The inconvenient truth about flocks		(arXiv:2503.17064)	D
2025	<b>PAPOULAR D.</b>	Measuring the dynamics of an XXZ quantum simulator and controlling collapse through symmetries		(arXiv:2508.02468)	A
2025	<b>ROSE F., RANCON A., BALOG I.</b>	Constraint effective action and critical correlation functions at fixed magnetization		(arXiv:2509.05195)	A
2025	<b>SOKOLOVSKI D., MATZKIN A.</b>	Wave packets, "negative times" and the elephant in the room		(arXiv:2507.19105)	A
2025	<b>TIRRITO E., LUMIA L., PAVIGLIANITI A., LAMI G., SILVA A., TURKESHI X., COLLURA M.</b>	Magic phase transitions in monitored gaussian fermions		(arXiv:2507.07179 )	B/C
2025	<b>TIXIDRE F., MONGILLO G., TORCINI A.</b>	Is the cortical dynamics ergodic? A numerical study in partially symmetric networks of spiking neurons		(arXiv:2508.04354)	D
2025	<b>ZUMER B., DAEM F., MATZKIN A.</b>	Revivals and quantum carpets for the relativistic Schrödinger equation		(arXiv:2511.05200)	A
2024	<b>BIAGETTI L., LEBEK M., PANFIL M., DE NARDIS J.</b>	Generalised BBGKY hierarchy for near-integrable dynamics		(arXiv:2408.00593)	B/C
2024	<b>COLLURA M., DE NARDIS J., ALBA V., LAMI G.</b>	The quantum magic of fermionic Gaussian states		(arXiv:2412.05367)	A
2024	<b>GUTIERREZ DE LA CAL X., ALKHATEEB M., PONS M., MATZKIN A., SOKOLOVSKI D.</b>	Quantum statistical effects in one-particle densities: scattering and pair production		(arXiv:2407.13905)	A
2024	<b>HALIMEH J.C., KHODAEVA U.E., KOVRIZHIN D.L., MOESSNER R., KNOLLE J.</b>	Disorder-Free Localization for Benchmarking Quantum Computers		(arXiv:2410.08268)	A
2024	<b>KOVRIZHIN D., et al</b>	Observation of disorder-free localization and efficient disorder averaging on a quantum processor		(arXiv:2410.06557)	A
2024	<b>MAITRA A., et al</b>	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	<b>MATO G., POLITI A., TORCINI A.</b>	Chaotic synchronization in adaptive networks of pulse-coupled oscillators		(arXiv:2407.08453)	D
2024	<b>SHARIPOV R., TIUTIAKINA A., GORSKY A., GRITSEV V., POLKOVNIKOV A.</b>	Hilbert space geometry and quantum chaos		(arXiv:2411.11968)	B/C
2023	<b>DE LUCA A., GIACCHETTI G.</b>	Elusive phase transition in the replica limit of monitored systems		(arXiv:2306.12166)	A
2022	<b>DUPREY Q., MATZKIN A.</b>	Comment on "Does the weak trace show the past of a quantum particle?"		(arXiv:2202.11574)	A
2022	<b>KOIBUCHI H., KATO F., EL HOG S., DIGUET G., DUCHARNE B., UCHIMOTO T., DIEP H.T.</b>	Effect of Geometric Confinement on the Stabilization of Skyrmions.		(arXiv:2208.03847)	A
2020	<b>NARAYAN SAHOO S., HOME D., MATZKIN A., SINHA U.</b>	Comment on "Observing the "quantum Cheshire cat" effect with noninvasive weak measurement".		(arXiv:2006.00792)	A

**LPTM - Preprints**

2020	<b>TARPAU C., CEBEIRO J., NGUYEN M.K., ROLLET G., DUMAS L.</b>	On the design of a CST system and its extension to a bi-imaging modality.		(arXiv:2007.02750)	B
2016	<b>CANTINI L.</b>	Inhomogenous Multispecies TASEP on a ring with spectral parameters.		(arXiv:1602.07921)	B