

LPTM - Preprints

Année	Auteur(s)	Titre article	Revue	Archivage	Thème
2026	CHARNAY E., ESCOUBET A., COPIE F., RANDOUX S., <u>BONNEMAIN T.</u> , BASTIANELLO A., SURET P.	Experimental observation of ballistic correlations in integrable turbulence		(arXiv:2601.21085)	
2026	<u>HONECKER A.</u> , ZHITOMIRSKY M.E., WIETEK A., RICHTER J.	Field-induced states and thermodynamics of the frustrated Heisenberg antiferromagnet on a square lattice		(arXiv:2601.14380)	A
2026	KARLOVA K., RUFINO A., VERKHOLYAK T., CACI N., WESSEL S., STRECKA J., MILA F., <u>HONECKER A.</u>	Approaching Kasteleyn transition in frustrated quantum Heisenberg antiferromagnets		(arXiv:2601.14382)	A
2025	ALEXANDER G.P., KOLE S.J., <u>MAITRA A.</u> , RAMASWAMY S.	Screw Symmetry, Chiral Hydrodynamics and Odd Instability in Active Cholesterics		(arXiv:2508.00684)	D
2025	ANGULO-GARCIA D., <u>TORCINI A.</u>	A theory for self-sustained balanced states in absence of strong external currents		(arXiv:2510.17492)	D
2025	AVAN J., FRAPPAT L., RAGOUCY E.	Quadratic Poisson brackets for the Camassa--Holm peakons		(arXiv:1602.07921)	B/C
2025	BAILLOU R., PEDROSA M., GUIGUE Q., MEINIER S., DARNIGE T., <u>PERUANI F.</u> , CLEMENT E.	Confinement controls bacterial spreading at all scales		(arXiv:2503.11364)	D
2025	<u>BALLESTEROS FERRAZ L.</u>	Dynamical discontinuities in repeated weak measurements revealed by complex weak values		(arXiv:2511.03352)	A
2025	<u>BALLESTEROS FERRAZ L.</u> , ELOUARD C.	Weak continuous measurements require more work than strong ones		(arXiv:2502.09732)	A
2025	<u>BALLESTEROS FERRAZ L.</u> , <u>MATZKIN A.</u> , KUMAR PAN A.	Temperature-induced measurement sensitivity enhancement via imaginary weak values		(arXiv:2509.04048)	A
2025	BRIGATTI E., <u>PERUANI F.</u>	Metamorphosis of collective patterns modulated by non-reciprocal interactions		(arXiv:2505.02672)	D
2025	<u>BRIOZZO G.</u> , SIBONA G.J., <u>PERUANI F.</u>	Resource and population dynamics in an agent-environment interaction model		(arXiv:2512.08762)	D
2025	COSTA J., RIBEIRO P, <u>DE LUCA A.</u>	Emergence of universality in transport of noisy free fermions		(arXiv:2504.00188)	B/C
2025	CRAPS B., EVNIN O., <u>KOVRIZHIN D.</u> , PASCUZZI G.	Unified theory of local integrals of motion		(arXiv:2512.09595)	A
2025	<u>DAEM F.</u> , DURT T., <u>MATKIN A.</u>	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	<u>DIEP H.T.</u> , NGO V.T.	Is the hyperscaling relation violated below the upper critical dimension in some particular cases?		(arXiv:2507.02159)	A
2025	DOWLING N., <u>DE NARDIS J.</u> , HEINRICH M., TURKESHI X., PAPPALARDI S.	Free Independence and Unitary Design from Random Matrix Product Unitaries		(arXiv:2508.00051)	B/C
2025	DUTTA S., <u>SAHA A.</u>	Stochastic Heat Engine Using a Single Brownian Ellipsoid		(arXiv:2505.17313)	D
2025	GHAZIKHANIAN N., ALSPAUGH D.J., SALEV P., <u>FRATINO L.</u> , ROZENBERG M.J., SCHULLER I.K.	Enhanced stochasticity in irradiated vanadium oxide oscillators		(arXiv:2407.13905)	A
2025	HUBNER F., <u>BIAGETTI L.</u> , <u>DE NARDIS J.</u> , DOYON B.	Diffusive hydrodynamics of hard rods from microscopics		(arXiv:2503.07794)	A
2025	KANT R., <u>MAITRA A.</u> , SOOD A.K., RAMASWAMY S.	Edge states, pairing, and sorting of motile chiral particles		(arXiv:2509.00729)	D
2025	<u>KETHEPALLI J.</u> , <u>URILYON A.</u> , SADHU T., <u>DE NARDIS J.</u>	Ballistic macroscopic fluctuation theory via mapping to point particles		(arXiv:2505.18093)	D
2025	LA MONTAGNA G.M., BUREKOVIC S., <u>MAITRA A.</u> , NARDINI C.	Eppur si muove: Shape of topological defects -- and consequent motion -- in active nematics		(arXiv:2504.19665)	D
2025	<u>LAMI G.</u> , <u>DE LUCA A.</u> , TURKESHI X., <u>DE NARDIS J.</u>	Quantum State Design and Emergent Confinement Mechanism in Measured Tensor Network States		(arXiv:2504.16995)	B/C
2025	<u>LOIO H.</u> , <u>LAMI G.</u> , LEONE L., MCGINLEY M., TURKESHI X., <u>DE NARDIS J.</u>	Quantum State Designs via Magic Teleportation		(arXiv:2510.13950)	B/C

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2025	LUCAS M., RALCO A., HONECKER A., TRAMBLY DE LAISSARDIERE G.	Tetrahedral Core in a Sea of Competing Magnetic Phases in Graphene		(arXiv:2511.22714)	A
2025	MAITRA A., JENTSCH P., CHEN L., FAN LEE C., TONER J., RAMASWAMY S.	The inconvenient truth about flocks		(arXiv:2503.17064)	D
2025	MARCOLONGO B., SIBONA G.J., PERUANI F.	Spreading processes on heterogeneous active systems: spreading threshold, immunization strategies, and vaccination noise		(arXiv:2512.08878)	D
2025	PAPOULAR D.	Measuring the dynamics of an XXZ quantum simulator and controlling collapse through symmetries		(arXiv:2508.02468)	A
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:2507.19105)	A
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	TIXIDRE 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	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
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