

LPTM - Preprints

Année	Auteur(s)	Titre article	Revue	Archivage	Thème
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	ALKHATEEB M., <u>MATZKIN A.</u>	Microcausality and Tunneling Times in Relativistic Quantum Field Theory		(arXiv:2507.09066)	A
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> , 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:2405.18475)	A
2025	BRIGATTI E., <u>PERUANI F.</u>	Metamorphosis of collective patterns modulated by non-reciprocal interactions		(arXiv:2505.02672)	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	<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	GOLDOBIN D.S, AGEEVA M.V., DI VOLO M., <u>TIXIDRE F.</u> , <u>TORCINI A.</u>	Synaptic shot-noise triggers fast and slow global oscillations in balanced neural networks		(arXiv:2505.22373)	D
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>KETHEPALI 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	KHODAEVA U.E., <u>KOVRIZHIN D.</u> , KNOLLE J.	Quantum critical dynamical response of the twisted Kitaev spin chain		(arXiv:2506.18766)	A
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>MAITRA A.</u> , 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., <u>TRAMBLY DE LAISSARDIERE G.</u> , DUTREIX C., LAPERTOT G., VEUILLIN J-Y, RENARD V.T.	Experimental evidence of the topological obstruction in twisted bilayer graphene		(arxiv:2506.08913)	A
2025	<u>PAPOULAR D.</u>	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., <u>GUGLIELMO L.</u>	Emergence of Generic Entanglement Structure in Doped Matchgate Circuits		(arXiv:2507.12526)	B/C
2025	<u>ROSE F.</u> , RANCON A., BALOG I.	Constraint effective action and critical correlation functions at fixed magnetization		(arXiv:2509.05195)	A
2025	SAULIERE A., <u>LAMI G.</u> , BOYER C., <u>DE NARDIS J.</u> , <u>DE LUCA A.</u>	Universality in the Anticoncentration of Noisy Quantum Circuits at Finite Depths		(arXiv:2508.14975)	B/C
2025	SAULIERE A., MAGNI B., <u>LAMI G.</u> , TURKESHI X., <u>DE NARDIS J.</u>	Universality in the Anticoncentration of Chaotic Quantum Circuits		(arXiv:2503.00119)	B/C
2025	<u>SOKOLOVSKI D.</u> , <u>MATZKIN A.</u>	Wave packets, "negative times" and the elephant in the room		(arXiv:1602.07921)	A
2025	TIRrito E., LUMIA L., PAVIGLIANITI A., <u>LAMI G.</u> , SILVA A., TURKESHI X., COLLURA M.	Magic phase transitions in monitored gaussian fermions		(arXiv:2507.07179)	B/C

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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	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. , ZAHBA 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
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