

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2025	A	CAPONI S., DEVOS L., LECHEMINANT P., TOTSUKA K., VANDERSTRAETEN L.	Non-Landau quantum phase transition in modulated SU(N) Heisenberg spin chains	Phys. Rev. B 111	L020404	(DOI: 10.1103/PhysRevB.111.L020404)
2025	A	JAMAN A., ERATINO L., AHMADI M., ROCCO R., KOOI B.J., ROZENBERG M., BANERJEE T.	Electrically Induced Negative Differential Resistance States Mediated by Oxygen Octahedra Coupling in Manganites for Neuronal Dynamics	Adv. Func. Mater. 2025	2419840	(DOI: 10.1002/adfm.202419840)
2025	A	WAGNER M., OLDZIEJEWSKI R., ROSE F., KODER V., KUHNENKAMP C., IMAMOGLU A., SCHMIDT R.	Feshbach Resonances in Exciton–Charge–Carrier Scattering in Semiconductor Bilayers	Phys. Rev. Lett. 134	076903	(DOI: 10.1103/PhysRevLett.134.076903)
2025	A	URILYON A., SCOPA S., DEL VECCHIO G., DE NARDIS J.	Quantum fluctuating theory for one-dimensional shock waves	Phys. Rev. B 111	045401	(DOI: 10.1103/PhysRevB.111.045401)
2025	A	DJENABOU B., CIVITCIOGLU B., WEBB J. J., HONECKER A., ROMER R. A.	Machine learning of phases and structures for model systems in physics	J. Phys. Soc. Jpn. 94	031002	(DOI: 10.7566/JPSJ.94.031002)
2025	A	ALLAM J., MATZKINS A.	Characterizing entangled state update in different reference frames with weak measurements	Phys. Rev. A 111	022203	(DOI: 10.1103/PhysRevA.111.022203)
2025	A	ALKHATEEB M., GUTIERREZ DE LA CAL X., PONS M., SOKOLOVSKI D., MATZKIN A.	Relativistic Quantum Field Theory Approach to Wavepacket Tunneling: Lack of Superluminal Transmission	Phys. Rev. A 111	012222	(DOI: 10.1103/PhysRevA.111.012222)
2025	B/C	TAKEUCHI K.A., DE NARDIS J., BUSANI O., FERRARI P.L., VASSEUR R.	Partial yet definite emergence of the Kardar-Parisi-Zhang class in isotropic spin chains	Phys. Rev. Lett. 134	097104	(DOI: 10.1103/PhysRevLett.134.097104)
2025	B/C	LAMI G., DE NARDIS J., TURKESHI X.	Anticoncentration and State Design of Random Tensor Networks	Phys. Rev. Lett. 134	010401	(DOI: 10.1103/PhysRevLett.134.010401)
2025	A	CIVITCIOGLU B., ROMER R., HONECKER A.	Phase determination with and without deep learning	Phys. Rev. E 111	024131	(DOI: 10.1103/PhysRevE.111.024131)
2025	A	DIEP H.T.	Frustrated spin systems: history of the emergence of a modern physics	Comptes Rendus. Physique, Volume 26 (2025)		(DOI: 10.5802/crphys.235)
2025	B/C	HUILLET T., MARTINEZ S.	Statistical aspects of weighted balls in boxes problems with an emphasis on population models	J. Stat. Mech.	023203	(DOI: 10.1088/1742-5468/adaf24)
2025	B/C	HUILLET T.	Statistical Aspects of Two Classes of Random Binomial Trees and Forests.	Mathematics	291	(DOI: 10.3390/math13020291)
2025	D	SHEN Y., O'BYRNE J, SCHOENIT A., MAITRA A., MEGE R.M., VOITURIEZ R., LADOUX B.	Flocking and giant fluctuations in epithelial active solids	PNAS 122 (16)		(DOI: 10.1073/pnas.2421327122)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2025	D	CABALLERO F., MAITRA A., NARDINI C.	Interface dynamics of wet active systems	Phys. Rev. Lett. 134	087105	(DOI: 10.1103/PhysRevLett.134.087105)
2025	D	BELL S., ACKERMANN J., MAITRA A., VOITURIEZ R.	Ordering, spontaneous flows and aging in active fluids depositing tracks	Phys. Rev. E 111	L023405	(DOI: 10.1103/PhysRevE.111.L023405)
2025	D	LOBATO-DAUZIER N., MAITRA A., ESTEVEZ-TORRES A., GALAS J.C.	Confinement determines transport of a reaction-diffusion active matter front	Phys. Rev. X 15	021007	(DOI: 10.1103/PhysRevX.15.021007)
2025	A	LAMI G., HAUG T., DE NARDIS J.	Quantum State Designs with Clifford Enhanced Matrix Product States	PRX Quantum 6	010345	(DOI: 10.1103/PRXQuantum.6.010345)
2025	B/C	SANTINI A., LUMIA L., COLLURA M., GIACHETTI G.	Semiclassical Quantum Trajectories in the Monitored Lipkin-Meshkov-Glick Model	Phys. Rev. B 111	134305	(DOI: 10.1103/PhysRevB.111.134305)
2025	B/C	MELLO A.F., SANTINI A., LAMI G., DE NARDIS J., COLLURA M.	Clifford Dressed Time-Dependent Variational Principle	Phys. Rev. Lett. 134	150403	(DOI: 10.1103/PhysRevLett.134.150403)
2025	B/C	HUBNER F., BIAGETTI L., DE NARDIS J., DOYON B.	Diffusive hydrodynamics from long-range correlations	Phys. Rev. Lett. 134	187101	(DOI: 10.1103/PhysRevLett.134.187101)
2025	A	BAYO D., BALEDENT V., BOCCUNI A., ILAKOVAC V., CARNIATO S., FOURY-LEYLEKIAN P., POUGET J.-P., et al	Highly variable carbon environment in the κ - $\text{BEDT-TTF}_2\text{Cu}_2(\text{CN})_3$ salt probed by carbon K -edge x-ray absorption and resonant inelastic x-ray scattering spectroscopy	Phys. Rev. B 111	125160	(DOI: 10.1103/PhysRevB.111.125160)
2025	A	MEHAIGNERIE P., MACHU J., DURAN HERNANDEZ H., CREUTZER G., PAPOULAR D. J., RAIMOND J. M. SAYRIN C., BRUNE M.	Interacting Circular Rydberg Atoms Trapped in Optical Tweezers	PRX Quantum 6	010353	(DOI: 10.1103/PRXQuantum.6.010353)
2025	B/C	GIACHETTI G., DEFENU N.	On the Conditions for a Quantum Violent Relaxation	Phys. Rev. B 111	214301	(DOI: 10.1103/PhysRevB.111.214301)
2025	A	LECHEMINANT P., TANIZAKI Y., TOTSUKA K.	Infrared properties of two-dimensional $\text{SU}(N)/\text{H}$ nonlinear σ models at nonzero θ angles	SciPost Phys. 18	183	(DOI: 10.21468/SciPostPhys.18.6.183)
2025	D	BERGOIN R., TORCINI A., DECO G., QUOY M., ZAMORA-LOPEZ G.	Emergence and maintenance of modularity in neural networks with Hebbian and anti-Hebbian inhibitory STDP.	PLoS Comput Biol 21(4)	e13012973	(DOI: 10.1371/journal.pcbi.1012973)
2025	A	JAMAN A., FRATINO L., AHMADI M., ROCCO R., KOOI B.J., ROZENBERG M., BANERJEE T.	Electrically induced negative differential resistance states mediated by oxygen octahedra coupling in manganites for neuronal dynamics	Adv. Funct. Mater. 2025	2419840	(DOI: 10.1002/adfm.202419840)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2025	A	DAEM F., MATZKIN A.	Microcausality and Tunneling Times in Relativistic Quantum Field Theory	Phys. Rev. A 111	060202	(DOI: 10.1103/d38q-h3qw)
2025	B/C	TIUTIAKINA A., LOIO H., GIACHETTI G., DE NARDIS J., DE LUCA A.	Field theory for monitored Brownian SYK clusters	Quantum 9	1794	(DOI: 10.22331/q-2025-07-14-1794)
2025	D	ROUZAIRE Y., RAHMANI P., PAGONABARRAGA I., PERUANI F., LEVIS D.	Activity leads to topological phase transition in 2D populations of heterogeneous oscillators	Phys. Rev. Lett. 134	188301	(DOI: 10.1103/PhysRevLett.134.188301)
2025	D	PERUANI F. et al	The 2024 Motile Active Matter Roadmap	J. Phys.: Condens. Matter 37	143501	(DOI: 10.1088/1361-648X/adac98)
2025	B/C	DE LUCA A., LIU C., NAHUM A., ZHOU T.	Universality classes for purification in nonunitary quantum processes	Phys. Rev. X		(DOI: 10.1103/wlj6-mkk4)
2025	B/C	TURKESHI X., CALABRESE P., DE LUCA A.	Quantum Mpemba Effect in Random Circuits	Phys. Rev. Lett. 135	040403	(DOI: 10.1103/5d6p-8d1b)
2025	B/C	GERBINO F., GIACHETTI P., DE LUCA A.	Measurement-Induced Phase Transition in State Estimation of Chaotic Systems and the Directed Polymer	Phys. Rev. Research 7	033105	(DOI: 10.1103/6375-8ncz)
2025	B/C	CANTINI L., ZAHRA A.	Single impurity in the Totally Asymmetric Simple Exclusion Process	J. Stat. Mech.	043204	(DOI: 10.1088/1742-5468/adc4cc)
2025	B/C	LOIO H., CECILE G., GOPALAKRISHNAN S., LAMI G., DE NARDIS J.	Correlations, Spectra and Entanglement Transitions in Ensembles of Matrix Product States	Phys. Rev. B 112	035127	(DOI: 10.1103/ymzz-923j)
2025	B/C	ZUNKOVIC B., TORTA P., PECCI G., LAMI G., COLLURA M.	Variational ground-state quantum adiabatic theorem	Phys. Rev. Lett. 134	130601	(DOI: 10.1103/PhysRevLett.134.130601)
2025	B/C	PAVIGLIANTI A., LAMI G., COLLURA M., SIVLA A.	Estimating Nonstabilizerness Dynamics Without Simulating It	PRX Quantum 6	030320	(DOI: 10.1103/msm2-vmg7)
2025	B/C	MELLO A. F., LAMI G., COLLURA M.	Retrieving nonstabilizerness with neural networks	Phys. Rev. A 111		(DOI: 10.48550/arXiv.2403.00919)
2025	D	POPOLI P., MAITRA A., RAMASWAMY S.	Don't look back: Ordering and defect cloaking in non-reciprocal lattice XY models	Phys. Rev. Lett. 135	088303	(DOI: 10.1142/S0217979214300175)
2025	D	PERUANI F., CHAUDHURI D.	Active stop and go motion: a strategy to improve spatial exploration?	Phys. Rev. E		(DOI: 10.1103/2m8x-g81x)
2024	A	ALKHATEEB M., MATZKIN A.	Evolution of strictly localized states in non-interacting quantum field theories with background fields	Phys. Rev. A 109	062223	(DOI: 10.1103/PhysRevA.109.062223)
2024	A	ALLAM J., MATZKIN A.	Are Unitary Accounts of Quantum Measurements in Relativistic Wigner Friend Setups Compatible in Different Reference Frames?	Metrology (2024)	364	(DOI: 10.3390/metrology4030022)
2024	A	BAG S., FRATINO L. CAMPJAYI A., CIVELLI M., ROZENBERG M.	Coupling strongly correlated electron systems to a tunable electronic reservoir	Phys. Rev. B 109	195171	(DOI: 10.1103/PhysRevB.109.195171)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2024	A	CECILE G. , LOJO H. , DE NARDIS J.	Measurement-induced phase transitions by matrix product states scaling	Phys. Rev. Research 6	033220	(DOI: 10.1103/PhysRevResearch.6.033220)
2024	A	DAEM F. , MATZKIN A.	Tunneling dynamics of the relativistic Schrödinger/Salpeter equation	Phys. Scr. 100	015216	(DOI: 10.1088/1402-4896/ad9550)
2024	A	DAEM F. , MATZKIN A.	Dynamics, locality and weak measurements: trajectories and which-way information in the case of a simplified double-slit setup	Quantum Stud.: Math. Found		(DOI: 10.1007/s40509-024-00337-4)
2024	A	DIGUET G. , DUCHARNE S. , EL HOG S. , KATO F. , KOIBUCHI H. , UCHIMOTO T. , DIEP H.T.	Monte Carlo Studies on Geometrically Confined Skyrmions in Nanodots: Stability and Morphology under Radial Stresses	Comp. Mat. Sc. 243	113137	(DOI: 10.1016/j.commatsci.2024.113137)
2024	A	DOUCOT B. , KOVRIZHIN D. , MOESSNER R.	Meandering conduction channels and the tunable nature of quantized charge transport	PNAS, 2024 Vol. 12		(DOI: 10.1073/pnas.2410703121)
2024	A	ESSOUDA Y. , DIEP H.T. , ELLOUZE M.	Phase Transition and Magneto-caloric Properties of Perovskites Pr _{0.55} Sr _{0.45} MnO ₃ : Modeling versus Experiments	Physica A 635	129532	(DOI: 10.1016/j.physa.2024.129532)
2024	A	ESSOUDA Y. , DIEP H.T. , ELLOUZE M.	First-Order Phase Transition in Perovskites Pr _{0.67} Sr _{0.33} MnO ₃ - Magneto-Caloric Properties -- Effect of Multi-Spin Interaction	J. Mag. Magn. Materials 599	172105	(DOI: 10.1016/j.jmmm.2024.172105)
2024	A	FRATINO L. , et al	Laser-induced quenching of metastability at the Mott-insulator to metal transition	Phys. Rev. B 110	L081108	(DOI: 10.1103/PhysRevB.110.L081108)
2024	A	GLIDIC P. , PETKOVIC I. , PIQUARD C. , AASSIME A. , CAVANNA A. , JIN Y. , GENNSER U. , MORA C. , KOVRIZHIN D. , ANTHORE A. , PIERRE F.	Signature of anyonic statistics in the integer quantum Hall regime	Nat Commun 15	6578	(DOI: 10.1038/s41467-024-50820-0)
2024	A	KARLOVA K. , HONECKER A. , CACI N. , WESSEL S. , STRECKA S. , VERKHOLYAK T.	Thermodynamic properties of the macroscopically degenerate tetramer-dimer phase of the spin-1/2 Heisenberg model on the diamond-decorated square lattice	Phys. Rev. B 110	214429	(DOI: 10.1103/PhysRevB.110.214429)
2024	A	KHABTHANI J.J. , CHIKA K. , JEMAI G. , MAYOU D. , TRAMBLY DE LAISSARDIERE G.	Electronic structure and conductivity in functionalized multi-layer Black Phosphorene	Phys. Rev. B 110	045150	(DOI: 10.1103/PhysRevB.110.045150)
2024	A	KHODAEVA U.E. , KOVRIZHIN D. , KNOLLE J.	Quantum simulation of the 1D Fermi-Hubbard model as a Z ₂ lattice-gauge theory	Phys. Rev. Research 6	013032	(DOI: doi.org/10.1103/PhysRevResearch.6.013032)
2024	A	LECHEMINANT P. , TOTSUKA K.	Lieb-Schultz-Mattis constraints for the insulating phases of the one-dimensional SU(N) Kondo lattice model	Phys. Rev. B 110		(DOI: 10.1103/PhysRevB.110.075104)
2024	A	PAPOULARD D.J. , ZUMER B.	Quantum signatures of the mixed classical phase space for three interacting particles in a circular trap	Phys. Rev. A 110	012230	(DOI: 10.1103/PhysRevA.110.012230)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2024	A	SIVY D., KARLOVA K., STRECKA J.	Quantum Magnetism in Fe ₂ Cu ₂ Polymeric Branched Chains: Insights from Exactly Solved Ising-Heisenberg Model	Front. Phys. 12	1408429	(DOI: 10.3389/fphy.2024.1408429)
2024	A	STRECKA J., KARLOVA K.	Pseudo-transition between antiferromagnetic and charge orders in a minimal spin-pseudospin model of one-dimensional cuprates.	Eur. Phys. J. B 97	74	(DOI: 10.1140/epjb/s10051-024-00710-7)
2024	A	TIUTIAKINA A., DE LUCA A., DE NARDIS J.	Frame potential of Brownian SYK model of Majorana and Dirac fermions	J. High Energ. Phys. 2024	115	(DOI: 10.1007/JHEP01(2024)115)
2024	B/C	BIAGETTI L., CECILE G., DE NARDIS J.	Three-stage thermalisation of a quasi-integrable system	Phys. Rev. Research (2024)		
2024	B/C	CANTINI L.	Open 2-TASEP with integrable boundaries	J. Phys. A: Math. Theor.		(DOI: 10.1088/1751-8121/ad2cb2)
2024	B/C	CANTINI L., ZAHRA A.	Steady-state selection in multi-species driven diffusive systems	Euro Phys. Lett. 146	21006	(DOI: 10.1209/0295-5075/ad30cd)
2024	B/C	CECILE G., DE NARDIS J., IIIEVSKI E.	Squeezed ensembles and anomalous dynamic roughening in interacting integrable chains	Physical Review Letters 132 (13)	130401	(DOI: 10.1103/PhysRevLett.132.130401)
2024	B/C	CHAN A., DE LUCA A.	Projected state ensemble of a generic model of many-body quantum chaos	J. Phys. A : Math. and Theor. 57	405001	(DOI: 10.1088/1751-8121/ad7211)
2024	B/C	CHRISTOPOULOS A., DE LUCA A., KOVRIZHIN D.L., PROSEN T.	Dual symplectic classical circuits: An exactly solvable model of many-body chaos	SciPost Phys. 16	049	(DOI: 10.21468/SciPostPhys.16.2.049)
2024	B/C	GERBINO F., LE DOUSSAL P., GIACHETTI G., DE LUCA A.	A Dyson Brownian motion model for weak measurements in chaotic quantum systems	Quantum Rep. 2024	200-230	(DOI: 10.3390/quantum6020016)
2024	B/C	GONCALVES B.	An Interacting Neuronal Network with Inhibition: theoretical analysis and perfect simulation	MathematicS In Action 12	3-22	(DOI: 10.5802/msia.29)
2024	B/C	HUILLET T.	On sequential growth of trees subject to various labeling constraints: from enumeration to probability theory	Stochastic Models in Probability and Statistics Vol. 1	75-104	
2024	B/C	HUILLET T.	On the balance between Emigration and Immigration as Random Walks on the non-negative integers	Mathematics 2024		(DOI: 10.3390/math1010000)
2024	B/C	HUILLET Th.	Occupancy Problems Related to the Generalized Stirling Numbers.	J. Stat. Phys. 191		(DOI: 10.1007/s10955-023-03216-1)
2024	B/C	POZSGAY B, SHARIPOV R., TIUTIAKINA A., VONA I.	Adiabatic gauge potential and integrability breaking with free fermions	SciPost Phys. 17		(DOI: 10.21468/SciPostPhys.17.3.075)
2024	B/C	URICHUK A., SCOPA S., DE NARDIS J.	Navier-Stokes equations for low-temperature one-dimensional fluids	Phys. Rev. Lett. 132	243402	(DOI: 10.1103/PhysRevLett.132.243402)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2024	D	BEIRO M.G., CHUNG N.N., CHEW L.Y., GANDICA Y.	Signs of criticality in social explosions	Sci Rep 14 (2024)	3263	(DOI: 10.1038/s41598-024-53657-1)
2024	D	BERTRAND T., D ALESSANDRO J., MAITRA A., MERCIER B, MEGE R.M., LADOUX B., VOITURIEZ R.	Clustering and ordering in cell assemblies with generic asymmetric aligning interactions	Phys. Rev. Research 6	023022	(DOI: 10.1103/PhysRevResearch.6.023022)
2024	D	CHEN L., LEE C.F., MAITRA A., TONER J.	Dynamics of packed swarms: time-displaced correlators of two dimensional incompressible flocks	Phys. Rev. E 109	L012601	(DOI: 10.1103/PhysRevE.109.L012601)
2024	D	COURSON J., QUOY M., TIMOFEEVA Y, MANOS T.	An exploratory computational analysis in mice brain networks of widespread epileptic seizure onset locations along with potential strategies for effective intervention and propagation control	Frontiers in Computational Neuroscience	1360009	(DOI: 10.3389/fncom.2024.1360009)
2024	D	DE MIGUEL-ARRIBAS A., MORON-VIDAL J., FLORIA L. M., GRACIA-LAZARO C., HERNANDEZ L., MORENO Y.	Contests in two fronts	Chaos, Solitons and Fractals 179	114418	(DOI: 10.1016/j.chaos.2023.114418)
2024	D	DOUCHAMPS V., DI VOLO M., TORCINI A., BATTAGLIA D., GOUTAGNY R.	Gamma oscillatory complexity conveys behavioral information in hippocampal networks.	Nat. Commun. 15	1849	(DOI: 10.1038/s41467-024-46012-5)
2024	D	FELD Y., HARTMANN A.K., TORCINI A.	Coexistence of asynchronous and clustered dynamics in noisy inhibitory neural networks	N. J. Phys. 26	063017	(DOI: 10.1088/1367-2630/ad4dd5)
2024	D	GASCUEL H.M., RAHMANI P., BON R., PERUANI F.	A generic coupling between internal states and activity leads to activation fronts and criticality in active systems	Phys. Rev. Lett. 133	058301	(DOI/ 10.1103/PhysRevLett.133.058301)
2024	D	GOLDOBIN D, DI VOLO M, TORCINI A.	Discrete synaptic events induce global oscillations in balanced neural networks	Physical Review Letters 133	238401	(DOI: 10.1103/PhysRevLett.133.238401)
2024	D	JEDRZEJEWSKI A., HERNANDEZ L.	Symmetric conformity functions make decision-making processes independent of the distribution of learning strategies	Phys. Rev. Research 6	033093	(DOI:10.1103/PhysRevResearch.6.033093)
2024	D	KAUFMAN M, KAUFMAN S., DIEP H.T.	Social Depolarization: Blume-Capel Model	Physics 6	138-147	(DOI: 10.3390/physics6010010)
2024	D	KHALI S.S., PERUANI F., CHAUDHURI D.	When does an active bath behave as an equilibrium one?	Phys. Rev. E 109	024120	(DOI: 10.1103/PhysRevE.109.024120)
2024	D	KHALILIAN H., PERUANI F., SARABADANI J.	Structural dynamics and optimal transport of an active polymer	Soft Matter, 2024,20	7592-7600	(DOI: 10.1039/D4SM00504J)
2024	D	KOLE S. J., ALEXANDER G.P., MAITRA A., RAMASWAMY S.	Chirality and odd mechanics in active columnar phases	PNAS Nexus		(DOI: 10.1093/pnasnexus/pgae398)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2024	D	LODI M., PANAHİ S., SCIORTINO F., <u>TORCINI A.</u>, STORACE M.	Patterns of synchronized clusters in adaptive networks	Com. Phys. 7	198	(DOI: 10.1038/s42005-024-01688-5)
2024	D	MARCOLONGO B., <u>PERUANI F.</u>, SIBONA G.	Assessing the forecasting power of mean-field approaches for disease spreading using active systems	Physica A 648	129916	(DOI: 10.1016/j.physa.2024.129916)
2024	D	PAYRATO-BORRAS C., GRACIA-LAZARO C., <u>HERNANDEZ L.</u>, MORENO Y.	Beyond the aggregated paradigm: phenology and structure in mutualistic networks	J. Phys. Complex. 5	025013	(DOI: 10.1088/2632-072X/ad459e)
2024	D	<u>PERRIER R.</u>, SCHAWÉ H., <u>HERNANDEZ L.</u>	Phase coexistence in the fully heterogeneous Hegselmann–Krause opinion dynamics model	Sci. Rep. 14	241	(DOI: 10.1038/s41598-023-50463-z)
2024	D	SAAVEDRA R., <u>PERUANI F.</u>	Self-trapping of active particles induced by non-reciprocal interactions in disordered media	Phys. Rev. E 110	064602	(DOI: 10.1103/PhysRevE.110.064602)
2024	D	<u>TORCINI A.</u>, POLITI A.	A robust balancing mechanism for spiking neural networks	Chaos Fast Track 34	041102	(DOI: 10.1063/5.0199298)
2024	A	DE ANGELIS D., <u>DE NARDIS J.</u>, SCOPA S.	Enhanced correlations due to ballistic transport	Eur. Phys. L. 148 (6)	61003	(DOI: 10.1209/0295-5075/ad99fa)
2024	B/C	<u>BIAGETTI L.</u>, ALBA V.	Bound-state confinement after trap-expansion dynamics in integrable systems	J. Stat. Mech.	093103	(DOI: 10.1088/1742-5468/ad72dd)
2023	A	ALLAM J., <u>MATZKIN A.</u>	Effect of a moving mirror on the free fall of a quantum particle in a homogeneous gravitational field	Quantum Rep. 5	1	
2023	A	ALLAM J., <u>MATZKIN A.</u>	From observer-dependent facts to frame-dependent measurement records in Wigner friend scenarios	EPL 143	60001	(DOI: 10.1209/0295-5075/acfbf4)
2023	A	BAYO D., <u>HONECKER A.</u>, ROMER R.A.	The percolating cluster is invisible to image recognition with deep learning	New J. Phys. 25(11)	113041	(DOI: 10.1088/1367-2630/ad0525)
2023	A	CACI N., <u>KARLOVA K.</u>, VERHOLVAK T., STRECKA J., WESSEL S., <u>HONECKER A.</u>	Phases of the spin-1/2 Heisenberg antiferromagnet on the diamond-decorated square lattice in a magnetic field	Phys. Rev. B 107	115143	(DOI: 10.1103/PhysRevB.107.115143)
2023	A	<u>CECILE G.</u>, GOPALAKRISHAN S., VASSEUR R., <u>DE NARDIS J.</u>	Hydrodynamic relaxation of spin helices	Phys. Rev. B 108	075135	(DOI: 10.1103/PhysRevB.108.075135)
2023	A	CHEPALIANSKII A.D., MAJUMDAR S.N., <u>SCHAWÉ H.</u>, TRIZAC E.	Singular relaxation of a random walk in a box with a Metropolis Monte Carlo dynamics	J. Phys. A. 56 (25)		(DOI: 10.1088/1751-8121/acd829)
2023	A	<u>CHRISTOPOULOS A.</u>, LE DOUSSAL P., BERNARD D., <u>DE LUCA A.</u>	Universal out-of-equilibrium dynamics of 1D critical quantum systems perturbed by noise coupled to energy.	Phys. Rev. X 13	011043	(DOI: 10.1103/PhysRevX.13.011043)
2023	A	DIGUET G., DUCHARNE B., EL HOG S., KATO F., KOIBUCHI H., UCHIMOTO T., <u>DJEP H.T.</u>	Monte Carlo studies of skyrmion stabilization under geometric confinement and uniaxial strain.	Journal of Magnetism and Magnetic Materials	170819	(DOI: 10.1016/j.jmmm.2023.170819)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2023	A	DOUCOT B., MOESSNER R., KOVRIZHIN D.L.	Topological Electrostatics.	Journal of Physics: Condensed Matter 35 (7)		(DOI:10.1088/1361-648X/ac9443)
2023	A	EL KADERI Y., HONECKER A.,ANDRIYANOVA I.	Performance of Uncoded Implementation of Grover's Algorithm on Today's Quantum Processors	2023 IEEE Information Theory Workshop (ITW)	209-214	(DOI: 10.1109/ITW55543.2023.10160239)
2023	A	ESSOUDA Y., DIER H.T., ELLOUZE M., HLIL E.K.	Magnetic properties of perovskites Pr _{0.9} Sr _{0.1} Mn ₃ +0.9Mn ₄ +0.1O ₃ : Monte Carlo simulations and experiments	J. Magn. Magnetic Materials 588	171485	(DOI: 10.1016/j.jmmm.2023.171485)
2023	A	FRATINO L., ET AL.	Characteristic length scales of the electrically induced insulator-to-metal transition	Phys. Rev. Research 5	013108	(DOI: 10.1103/PhysRevResearch.5.013108)
2023	A	FRATINO L., ET AL.	Stochasticity in the synchronization of strongly coupled spiking oscillators	Appl. Phys. Lett. 122	094105	(DOI: 10.1063/5.0129205)
2023	A	FRATINO L., et al.	Light induced decoupling of electronic and magnetic properties in manganites	Phys. Rev. Applied 19	044077	(DOI: 10.1103/PhysRevApplied.19.044077)
2023	A	GUTIERREZ DE LA CAL X., MATZKIN A.	Beyond the Light-Cone Propagation of Relativistic Wavefunctions: Numerical Results	Dynamics 2023 3(1)	60-70	(DOI: 10.3390/dynamics3010005)
2023	A	HERVIOU L., CAPPONI S., LECHEMINANT P.	Even-odd effects in the J ₁ -J ₂ SU(N) Heisenberg spin chain	Phys. Rev. B 107	205135	(DOI: 10.1103/PhysRevB.107.205135)
2023	A	HOANG D.T., DIER H.T.	Spin transport in magnetically ordered systems : ferromagnets, antiferromagnets and frustrated system	Condensed Matter 8(1)	3	(DOI: 10.3390/condmat8010003)
2023	A	LOIO H., DE LUCA A., DE NARDIS J., TURKESHI X.	Purification Timescales in Monitored Fermions	Phys. Rev. B 108	L020306	(DOI: 10.1103/PhysRevB.108.L020306)
2023	A	MCCULLOCH E., DE NARDIS J., GOPALAKRISHNAN S., VASSEUR R.	Full Counting Statistics of Charge in Chaotic Many-body Quantum Systems	Phys. Rev. Lett. 131	210402	(DOI: 10.1103/PhysRevLett.131.210402)
2023	A	MESPLE F., WALET, N.R., TRAMBLAY DE LAISSARDIERE G., GUINEA F., DOSENOVIC D., OKUNO H, PAILLET C, MICHON A., CHAPELIER C., RENARD V.T.	Giant Atomic Swirl in Graphene Bilayers with Biaxial Heterostrain	Adv. Mater. 2023,35	2306312	(DOI: 10.1002/adma.202306312)
2023	A	PAPOULAR D., ZUMER B.	Quantum scar affecting the motion of three interacting particles in a circular trap	Phys. Rev. A 107	022217	(DOI: 10.1103/PhysRevA.107.022217)
2023	A	SAHO S.N., CHAKRABORTI S., KANJILAKL S., HOME D., MATZKIN A., SINHA U.	Unambiguous joint detection of spatially separated properties of a single photon in the two arms of an interferometer	Commun Phys 6	203	(DOI: 10.1038/s42005-023-01317-7)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2023	A	SALEV P., FRATINO L., SASAKI D., BAG S., TAKAMURA Y., ROZENBERG M, SCHULLER I.K.	Magnetoresistance anomaly during the electrical triggering of a metal-insulator transition	Phys. Rev. B 108	174443	(10.1103/PhysRevB.108.174434)
2023	A	SHARAFULLIN F., NUGUMANOV A.G., BAISHEVA A.H., YUDULDASHEVA A.R., DIEP H.T.	Stability of a Skyrmion Crystal in a Frustrated Antiferromagnetic Bilayer on a Triangular Lattice	Bulletin of the Russian Academy of Sciences - Physics	443-447	(DOI: 10.3103/S1062873822701416)
2023	A	SHARAFULLIN I.F., YULDASHEVA A.R., ADDRAKHMANOV D.I., KIZIRGULOV I.R., DIEP H.T.	Phase transitions driven by magnetoelectric and interfacial Dzyaloshinskii-Moriya interaction	J. Magn. Magn. Materials 587	171317	(DOI: 10.1016/j.jmmm.2023.171317)
2023	A	SHIVAM S., DE LUCA A., HUSE D.A., CHAN A.	Many-body quantum chaos and emergence of Ginibre ensemble	Phys. Rev. Lett. 130	140403	(DOI: 10.1103/PhysRevLett.130.140403)
2023	A	STRECKA J., KARLOVA K., VERKHOLYAK T., CACI N., WESSAL S., HONECKER A.	Thermal first-order phase transitions, Ising critical points, and reentrance in the Ising-Heisenberg model on the diamond-decorated square lattice in a magnetic field	Phys. Rev. B 107 (13)		(DOI: 10.1103/PhysRevB.107.134402)
2023	A	VENKATESWARLU S., MISSAOUI A., HONECKER A., TRAMBLÉ DE LAISSARDIERE G.	Atomic relaxation and electronic structure in twisted bilayer MoS ₂ with rotation angle of 5.09 degrees	Eur. Phys. J. Appl. Phys.	39	(DOI: 10.1051/epjap/2023230060)
2023	A	ZHANG X., XIA J., TRETIKOV O.A., DIEP H.T., ZHAO G., et al.	Current-induced Helicity Switching of Frustrated Skyrmions on a Square Grid Obstacle Pattern	Journal of Magnetism Society of Japan	17	
2023	B	BELLETE J., GAINUTDINOV A.M., JACONSEN J.L., SALEUR H., TAVARES T.S.	Topological defects in lattice models and affine Temperley-Lieb algebra.	Commun. Math. Phys. 400	1203–1254	(DOI: 10.1007/s00220-022-04618-0)
2023	B/C	AVAN J., FRAPPAT L., RAGOUCY E.	A new integrable structure associated to the Camassa-Holm peakons	SciPost Phys. 15	228	(DOI: 10.21468/SciPostPhys.15.6.228)
2023	B/C	COLLET P., DUNLOP F., HUILLET T., MARDIN A.	A Gibbsian random tree with nearest neighbour interaction	Journal of Statistical Physics 190	78	(DOI: 10.1007/s10955-023-03087-6)
2023	B/C	COSTA J, RIBEIRO P., DE LUCA A., PROSEN T., SA L.	Spectral and steady-state properties of fermionic random quadratic Liouvillians	SciPost Phys. 15	145	(doi: 10.21468/SciPostPhys.15.4.145)
2023	B/C	DE NARDIS J., DOYON B.	Hydrodynamic gauge fixing and higher order hydrodynamic expansion	J. Phys. A 56		(DOI: 10.1088/1751-8121/acd153)
2023	B/C	DE NARDIS J., GOPALAKRISHNAN S., VASSEUR R.	Non-linear fluctuating hydrodynamics for KPZ scaling in isotropic spin chains	Physical Review Letters 131	197102	(DOI: 10.1103/PhysRevLett.131.197102)
2023	B/C	FERNANDEZ TOLEDANO J.C., DE CONINCK J., DUNLOP F., HUILLET T.	How heterogeneous wettability enhances boiling.	Physica A: Statistical Mechanics and its Applications (622)	128847	(DOI: 10.1016/j.physa.2023.128847)
2023	B/C	HUILLET T.	A shot-noise approach to decay/surge collective population models.	Asian Journal of Statistical Sciences	61-67	

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2023	B/C	HUILLET T., MARTINEZ S.	Sterile versus prolific individuals pertaining to linear-fractional Bienaym{é}-Galton-Watson trees	J. Stat. Mech.	083405	(DOI :10.1088/1742-5468/aceb52)
2023	B/C	HUILLET T., MOHLE M.	On Bernoulli trials with unequal harmonic success probabilities	Metrika		(DOI: 10.1007/s00184-023-00913-5)
2023	B/C	LUCAS M., PIROLI L., DE NARDIS J., DE LUCA A.	Generalized deep thermalization for free fermions	Phys. Rev. A 107	032215	(DOI: 10.1103/PhysRevA.107.032215)
2023	B/C	ORLOV P., TIUTIAKINA A., SHARIPOV R., PETROVA E., GRITSEV V., KURLOV D.V.	Adiabatic eigenstate deformations and weak integrability breaking of Heisenberg chain	Phys. Rev. B 107	184312	(DOI: 10.1103/PhysRevB.107.184312)
2023	B/C	ROSSO L., BIELLA A., DE NARDIS J., MAZZA L.	A dynamical theory for one-dimensional fermions with strong two-body losses: universal non-Hermitian Zeno physics and spin-charge separation.	Phys. Rev. A 107	013303	(DOI:10.1103/PhysRevA.107.013303)
2023	B/C	SANTINI A., SOLFANELLI A., GHERARDINI S., GIACHETTI G.	Observation of partial and infinite-temperature thermalization induced by repeated measurements on a quantum hardware	J. Phys. Commun. 7	065007	(DOI: 10.1088/2399-6528/acdd4f)
2023	B/C	SCHIMMENTI V.M., LANZA F., HANSEN A., FRANZ S., ROSSO A., TALON L., DE LUCA A.	Darcy's law of yield stress fluids on a treelike network	Phys. Rev. E 108	L023102	(DOI: 10.1103/PhysRevE.108.L023102)
2023	D	ASSUEID J., GANDICA Y.	Detection and effect of social events on Wikipedia data-set for studying human preferences	Frontiers in Big Data. Sec. Data Science. 6 (2023)		(DOI: 10.3389/fdata.2023.1077318.)
2023	D	BERGOIN R., TORCINI A., DECO G., QUOY M., ZAMORA-LOPEZ G.	Inhibitory neurons control the consolidation of neural assemblies via adaptation to selective stimuli2	Sci Rep 13		(DOI: 10.1101/2023.04.25.538236)
2023	D	CARBALLOSA A., MUNUZURI A.P., BOCCALETTI S., TORCINI A., OLMÍ S.	Cluster states and n -transition in the Kuramoto model with higher order interactions	Chaos, Solitons & Fractals (2023)	114197	(DOI: 10.1016/j.chaos.2023.114197)
2023	D	CHEPELIANSKII A.D., MAJUMDAR S.N., SCHAWÉ H., TRIZAC E.	Metropolis Monte Carlo sampling: convergence, localization transition and optimality	J. Stat. Mech.: Th. And Exp.		(DOI: 10.1088/1742-5468/ad002d)
2023	D	DIEP H.T., KAUFMAN M, KAUFMAN S.	An Agent-Based Statistical Physics Model for Political Polarization: A Monte Carlo Study	Entropy 25	981	(DOI: 10.3390/e25070981)
2023	D	FERRARA A., ANGULO-GARCIA D., TORCINI A., OLMÍ S.	Population spiking and bursting in next generation neural masses with spike-frequency adaptation	Phys. Rev. E 107	024311	(DOI: 10.1103/PhysRevE.107.024311)
2023	D	KRABBE P., SCHAWÉ H., HARTMANN A.K.	Replica symmetry breaking for Ulam's problem	Phys. Rev. B 107	064208	(DOI: 10.1103/PhysRevB.107.064208)
2023	D	MAITRA A.	Two-dimensional long-range uniaxial order in three-dimensional active fluids	Nature Physics (2023)		(DOI: 10.1038/s41567-023-01937-4)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2023	D	NAVA-SEDENO J.M. , HATZIKIROU H. , VOS-BOHME A. , BRUSCH L. , DEUTSCH A. , PERUANI F.	Vectorial active matter on the lattice: polar condensates and nematic filaments	New J. Phys. 25		(DOI: 10.1088/1367-2630/ad1498)
2023	D	SCHAWA H. , BEIRO M.G. , ALVAREZ-HAMELIN J.I. , KOTZINOS D. , HERNANDEZ L.	Understanding who talks about what: comparison between the information treatment in traditional media and online discussions	Scientific Reports (2023) 13	3809	(DOI: 10.1038/s41598-023-30367-8)
2023	D	TRUONG T.T.	Radon transform on Cormack algebraic a-curve inversion formula	Inverse Problems 39(8)	085008	(DOI: 10.1088/1361-6420/acdf7a)
2022	A	ALKHATEEB M. , MATZKIN A.	Relativistic spin-0 particle in a box: Bound states, wave packets, and the disappearance of the Klein paradox.	American Journal of Physics 90(4)	297	(arXiv:2103.06538)(DOI: 10.1119/10.0009408)
2022	A	ALKHATEEB M. , MATZKIN A.	Relativistic Bohmian trajectories and Klein-Gordon currents for spin-0 particles.	Found. Phys. 52, 104 (2022)	52-104	(DOI: 10.1007/s10701-022-00625-2)
2022	A	ALKHATEEB M. , MATZKIN A.	Space-time resolved quantum field approach to Klein tunneling dynamics across a finite barrier.	Phys. Rev. A 106		(DOI: 10.1103/PhysRevA.106.L060202)
2022	A	CHAN A. , SHIVAM S. , HUSE D.A. , DE LUCA A.	Many-Body Quantum Chaos and Space-time Translational Invariance.	Nat Commun 13, 7484 (2022)		(DOI: 10.1038/s41467-022-34318-1)
2022	A	DEBBICHI M. , SAID H. , GARBOUJ H. , EL HOG S. , DINH V.A.	A new ternary pentagonal monolayer based on Bi with large intrinsic Dzyaloshinskii-Moriya interaction	Journal of Physics D : Volume 55, Number 1		(DOI: 10.1088/1361-6463/ac28ba)
2022	A	DIEP H.T.	Quantum Spin-Wave Theory for Non-Collinear Spin Structures, a Review .	Symmetry 2022, 14(8)	1716	(DOI: 10.3390/sym14081716)
2022	A	DUPREY Q. , MATZKIN A.	Proposal to observe path superpositions in a double-slit setup.	Phys. Rev. A 105	052231	(arXiv:2112.10865)(DOI: 10.1103/PhysRevA.105.052231)
2022	A	EL HOG S. , KATO F. , HONGO S. , KOIBUCHI H. , DIGUET G. , HUCHIMOTO T. , DIEP H.T.	The stability of 3D skyrmions under mechanical stress studied via Monte Carlo calculations.	Results in Physics 38	105578	(hal-03673104) (DOI: 10.1016/j.rinp.2022.105578)
2022	A	EL HOG S. , SHARAFULLIN I.F. , DIEP H.T. , GARBOUJ H. , DEBBICHI M. , SAID M.	Frustrated antiferromagnetic triangular lattice with Dzyaloshinskii-Moriya interaction: Ground states, spin waves, skyrmion crystal, phase transition.	Journal of Magnetism and Magnetic Materials 2022-09	169920	(arXiv:2204.12248)(DOI: 10.1016/j.jmmm.2022.169920)
2022	A	HONECKER A. , BREINIG W. , TIWARI M. , FEYERHERM R. , BLECKMANN M. , SULLOW S.	Numerical Interchain Mean-Field Theory for the Specific Heat of the Bimetallic Ferromagnetically Coupled Chain Compound MnNi(NO ₂) ₄ (en) ₂ (en = Ethylenediamine).	Molecules 2022, 27(19), 6546		(DOI : 10.3390/molecules27196546)
2022	A	WEBER L. , HONECKER A. , NORMAND B. , CORBOZ P. , MILA F. , WESSEL S.	Quantum Monte Carlo simulations in the trimer basis: first-order transitions and thermal critical points in frustrated trilayer magnets.	SciPost Phys. 12	054	(arXiv:2105.05271)(DOI: 10.21468/SciPostPhys.12.2.054)
2022	A	XIA J. , ZHANG X. , TRETIAKOV O.A. , DIEP H.T. , YANG J. , ZHAO G. , EZAWA M. , ZHOU Y. , LIU X.	Bifurcation of a topological skyrmion string.	Phys. Rev. B 105	214402	(arXiv:2205.09258)(DOI: 10.1103/PhysRevB.105.214402)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2022	B/C	AVAN J., FRAPPAT L., RAGOUCY E.	Integrable quadratic structures in peakon models.	SciPost Phys. 13	044	(arXiv:2203.13593)(DOI: 10.21468/SciPostPhys.13.2.044)
2022	B/C	CANTINI L., ZAHRA A.	Hydrodynamic behavior of the two-TASEP.	J. Phys. A: Math. Theor. 55(30)	305201	(arXiv:2201.11982)(DOI: 10.1088/1751-8121/ac79e3)
2022	B/C	COHEN J.E., HUILLET T.	Taylor's law for some infinitely divisible probability distributions from population models.	Journal of Statistical Physics 188	33	(arXiv:2206.13283)(DOI: 10.1007/s10955-022-02962-y)
2022	B/C	COLLURA M., DE LUCA A., ROSSINI D., LEROSE A.	Discrete Time-Crystalline Response Stabilized by Domain-Wall Confinement.	Phys. Rev. X 12	031037	(arXiv:2110.14705)(DOI: 10.1103/PhysRevX.12.031037)
2022	B/C	DE NARDIS J., DOYON B., MEDENJAK M., PANFIL M.	Correlation functions and transport coefficients in generalised hydrodynamics.	J. Stat. Mech.: Th. And Exp.	014002	(arXiv:2104.04462)(DOI: 10.1088/1742-5468/ac3658/meta)
2022	B/C	DE NARDIS J., GOPALAKRISHNAN S., VASSEUR R., WARE B.	Subdiffusive hydrodynamics of nearly integrable anisotropic spin chains.	PNAS 119(34)	e2202823119	(arXiv:2109.13251)(DOI: 10.1073/pnas.2202823119)
2022	B/C	DEL VECCHIO DEL VECCHIO G., DE LUCA A., BASTIANELLO A.	Transport through interacting defects and lack of thermalisation.	SciPost Phys. 12	060	(arXiv:2104.13887)(DOI: 10.21468/SciPostPhys.12.2.060)
2022	B/C	DUNLOP F., MARDIN A.	Galton-Watson trees with first ancestor interaction.	Journal of Statistical Physics vol 189, Article number: 38		(DOI: 10.1007/s10955-022-03000-7)
2022	B/C	FERNANDEZ TOLEDANO J.C., FAGNIART C., CONTI G., DE CONINCK J., DUNLOP F., HUILLET T.	Optimizing fog harvesting by biomimicry.	Phys. Rev. Fluids 7	033604	(arXiv:2203.04675)(DOI: 10.1103/PhysRevFluids.7.033604)
2022	B/C	HUILLET T.	Random walks facing binomial catastrophes: from fixed to random survival probability.	Journal of Statistics: Advances in Theory and Applications 27(1)		(DOI: 10.18642/jsata_7100122243)
2022	B/C	HUILLET T.	Chance Mechanisms Involving Sibuya Distribution and its Relatives.	Sankhya B: the Indian Journal of Statistics		(DOI: 10.1007/s13571-022-00282-5)
2022	B/C	MOGES H.T., MANOS T., SKOKOS C.	Anomalous diffusion in single and coupled standard maps with extensive chaotic phase spaces.	Physica D: Nonlinear Phenomena	133120	(arXiv:2107.14635)(DOI: 10.1016/j.physd.2021.133120)
2022	B/C	PATIS P.A., MANOS T., CHAVES-VELASQUEZ L., SKOKOS C., PUERARI I.	Chaoticity in the vicinity of complex unstable periodic orbits in galactic type potentials.	Physica D: Nonlinear Phenomena	133050	(arXiv:2109.09656)(DOI: 10.1016/j.physd.2021.133050)
2022	C	GONCALVES B., HUILLET T., LOCHERBACH E.	On decay-surge population models.	Advances in Applied Probability	1 - 29	(DOI: 10.1017/apr.2022.30)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2022	D	CHEN L., LEE C.F., MAITRA A., TONER J.	Incompressible polar active fluids with quenched disorder in dimensions $d > 2$.	Phys. Rev. Lett. 129, 198001		(DOI :10.1103/PhysRevLett.129.198001)
2022	D	CHEN L., LEE C.F., MAITRA A., TONER J.	Packed swarms on dirt: two dimensional incompressible flocks with quenched and annealed disorder.	Phys. Rev. Lett. 129, 188004		(DOI :10.1103/PhysRevLett.129.188004)
2022	D	CHEN L., LEE C.F., MAITRA A., TONER J.	Hydrodynamic theory of two-dimensional incompressible polar active fluids with quenched and annealed disorder.	Phys. Rev. E 106, 044608		(DOI :10.1103/PhysRevE.106.044608)
2022	D	CLARK A.G., MAITRA A., JACQUES C., BERGERT M., PEREZ-GONZALEZ C., SIMON A., LEDERER L., DIZ-MUNOZ A., TREPAT X., VOITURIEZ R., MATIC VIGNJEVIC D.	Self-generated gradients steer collective migration on viscoelastic collagen networks.	Nature Materials 2022		(DOI:10.1038/s41563-022-01259-5)
2022	D	DEL JUNCO C., ESTEVEZ-TORRES A., MAITRA A.	Front speed and pattern selection of a propagating chemical front in an active fluid.	Phys. Rev. E 105	014602	(DOI:10.1103/PhysRevE.105.014602)
2022	D	DI VOLO M., SEGNERI M., GOLDOBIN D., POLITI A., TORCINI A.	Coherent oscillations in balanced neural networks driven by endogenous fluctuations.	Chaos 32	023120	(arXiv:2110.09439)(DOI:10.1063/5.0075751)
2022	D	GOMEZ-NAVA L., BON R., PERUANI F.	Intermittent collective motion in sheep results from alternating the role of leader and follower	Nature Physics (2022)		(DOI: 10.1038/s41567-022-01769-8)
2022	D	KAUFMAN M., KAUFMAN S., DIEP H.T.	Statistical Mechanics of Political Polarization.	Entropy 2022, 24(9)	1262	(DOI:10.3390/e24091262)
2022	D	MANOS T., SKOKOS C., PATSIS P.	Orbit evolution in growing stellar bars: bar-supporting orbits at the vertical ILR region.	Monthly Notices of the Royal Astronomical Society 509(2)		(arXiv:arXiv:2109.00514)(DOI:10.1093/mnras/stab2987)
2022	D	PAOLINI G., CISZAK M., MARINO F., OLMÍ S., TORCINI A.	Collective excitability in highly diluted random networks of oscillators	Chaos 32, 103108 (2022)		(DOI :10.1063/5.0102880)
2022	D	PEPE M.V., DEA C., GENSKOWSKY C., CAPASSO D., ROSET M.S., JAGER A.V., PERUANI F., KIERBEL A.	Reversible adhesion by type IV pili leads to formation of permanent localized clusters.	Isience 25 (12)		(DOI: 10.1016/j.isci.2022.105532)
2022	D	SARFATI G., MAITRA A., VOITURIEZ R., GALAS J-C., ESTEVEZ-TORRES A.	Crosslinking and depletion determine spatial instabilities in cytoskeletal active matter.	Soft Matter 2022(18)	3793-3800	(DOI:10.1039/D2SM00130F)
2022	D	SCHAWÉ H., HERNANDEZ L.	Higher order interactions destroy phase transitions in Deffuant opinion dynamics model.	Communications Physics 5	32	(arXiv:2111.12165)(DOI:10.1038/s42005-022-00807-4)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2022	D	SINGH P., KUNDU A., MAJUMDAR S.N., SCHAWÉ H.	Mean area of the convex hull of a run and tumble particle in two dimensions.	J. Phys. A: Math. Theor.		(arXiv:2112.08752)(DOI:10.1088/1751-8121/ac62bb)
2022	D	TRAN Q.D., GALIANA E., THOMEN P., COHEN C., ORANGE F., PERUANI F., NOBLIN X.	Coordination of two opposite flagella allows high-speed swimming and active turning of individual zoospores.	eLife 11:e71227		(DOI:10.1101/2021.04.23.441092)
2022	D	TRUONG T.T.	Dynamical symmetries of the 2D Newtonian Free Fall problem revisited	Symmetry 2022 (14)	27	(DOI:10.3390/sym14010027)
2021	A	ALKHATEEB M., GUTIERREZ DE LA CAL X., PONS M., SOKOLOVSKI D., MATZKIN A.	Relativistic time-dependent quantum dynamics across supercritical barriers for Klein-Gordon and Dirac particles.	Phys. Rev. A		(arXiv:2012.02725)
2021	A	BAILLY-REYRE A., DIEP H.T.	Vortex structure in magnetic nanodots: Dipolar interaction, mobile spin model, phase transition and melting.	Journal of Magnetism and Magnetic Materials 528	167813	(arXiv:2102.04080)(DOI:10.1016/j.jmmm.2021.167813)
2021	A	BENINI L., NALDESI P., RÖMER R.A., ROSCILDE T.	Loschmidt echo singularities as dynamical signatures of strongly localized phases.	New Journal of Physics 23	023030	(DOI:10.1088/1367-2630/abdf9d)
2021	A	CHEPELIANSKII A.D., PAPOULAR D., KONSTANTINOV D., BOUCHIAT H., KONO K.	Coupled pair of one- and two-dimensional magnetoplasmons on electrons on helium.	Phys. Rev. B 103(7)	075420	(arXiv:1910.08026)(DOI:10.1103/PhysRevB.103.075420)
2021	A	EL HOG S., KATO F., KOIBUCHI H., DIEP H.T.	Finsler geometry modeling and Monte Carlo study of skyrmion shape deformation by uniaxial stress.	Phys. Rev. B 104	024402	(arXiv:2103.12234)(DOI:10.1103/PhysRevB.104.024402)
2021	A	ISMAEL A., ALKHATEEB M., CHAMOUN N., LASHIN E.I.	Texture of single vanishing subtrace in neutrino mass matrix.	Phys. Rev. D 103	035020	(DOI:10.1103/PhysRevD.103.035020)
2021	A	ISMAEL A., LASHIN E.I., ALKHATEEB M., CHAMOUN N.	Texture of one equality in neutrino mass matrix.	Nuclear Physics B 971	115541	(DOI:10.1016/j.nuclphysb.2021.115541)
2021	A	KHABTHANI J.J., MISSAOUI A., MAYOU D., TRAMBLÉ DE LAISSARDIÈRE G.	Electronic transport properties monitored by selective functionalization in Bernal bilayer graphene.	Phys. Rev. B 104	245125	(arXiv:2105.02733)(DOI:10.1103/PhysRevB.104.245125)
2021	A	LARREA JIMENEZ J., CRONE S.P.G., FOGH E., ZAYED E., LORTZ R., POMJAKUSHINA E., CONDER K., LAÜCHLI A. M., WEBER L., WESSEL S., HONECKER A., NORMAND B., RÜEGG Ch., CORBOZ P., RONNOW M., MILA F.	A quantum magnetic analogue to the critical point of water.	Nature 592	370-375	(arXiv:2009.14492)(DOI:10.1038/s41586-021-03411-8)
2021	A	LUSTOSA F.B., COLIN S., PEREZ BERGLIAFFA S.E.	Quantum relaxation in a system of harmonic oscillators with time-dependent coupling.	Proc. R. Soc. A.477	20200606	(arXiv:2007.02939)(DOI:10.1098/rspa.2020.0606)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2021	A	MESPLE F. MISSAOUI A. , CEA T., HUDER L., TRAMBLY DE LAISSARDIERE G. , GUINEA F., CHAPELIER C., RENARD V.T.	Heterostrain Determines Flat Bands in Magic-Angle Twisted Graphene Layers.	Phys. Rev. Lett. 127	126405	(arXiv:2012.02475)(DOI:10.1103/PhysRevLett.127.126405)
2021	A	SCHLUTER H., GAYK F., SCHMIDT H.J., HONECKER A. , SCHNACK J.	Accuracy of the typicality approach using Chebyshev polynomials.	Zeitschrift für Naturforschung A 76(9)	823-834	(arXiv:2104.13218)(DOI:10.1515/zna-2021-0116)
2021	A	SCOQUART T., LARRE P.E. , DELANDE D., CHERRORET N.	Weakly interacting disordered Bose gases out of equilibrium: From multiple scattering to superfluidity.	Europhysics Letters 132(6)	66001	(arXiv:2012.05526)(DOI:10.1209/0295-5075/132/66001)
2021	A	SOKOLOVSKI D., MATZKIN A.	Wigner's Friend Scenarios and the Internal Consistency of Standard Quantum Mechanics .	Entropy 23(9)	1186	(arXiv:2102.08709)(DOI:10.3390/e23091186)
2021	A	VAHEDI J. , PETERS R.	Edge magnetic properties of black phosphorene nanoribbons.	Phys. Rev. B 103(7)	075108	(arXiv:2012.14052)(DOI:10.1103/PhysRevB.103.075108)
2021	A	VAHEDI J., PETERS R., MISSAOUI A. , HONECKER A. , TRAMBLY DE LAISSARDIERE G.	Magnetism of magic-angle twisted bilayer graphene.	SciPost Phys. 11	083	(arXiv:2104.10694)(DOI:10.21468/SciPostPhys.11.4.083)
2021	A	ZHANG X., XIA J., EZAWA M., TRETIKOV O.A., DIEP H.T. , ZHAO G., LIU X., ZHOU Y.	A frustrated bimeronium: Static structure and dynamics.	Appl. Phys. Lett. 118	052411	(arXiv:2010.10822)(DOI:10.1063/5.0034396)
2021	A	ZHANG X., XIA J., TRETIKOV O.A., DIEP H.T. , ZHAO G., YANG J., ZHOU Y., EZAWA M. LIU X.	Dynamic transformation between a skyrmion string and a bimeron string in a layered frustrated system.	Phys. Rev. B 104	L220406	(arXiv:2108.01365)(DOI:10.1103/PhysRevB.104.L220406)
2021	A,B/C	DURNIN J., DE LUCA A. , DE NARDIS J. , DOYON B.	Diffusive hydrodynamics of inhomogenous Hamiltonians.	J. Phys. A: Math. Theor. 54(49)	494001	(arXiv:2105.13068)(DOI:10.1088/1751-8121/ac2c57/meta)
2021	B/C	BASTIANELLO A., DE LUCA A. , VASSEUR R.	Hydrodynamics of weak integrability breaking.	J. Stat. Mech. 2021	114003	(arXiv:2103.11997)(DOI:10.1088/1742-5468/ac26b)
2021	B/C	BONNEMAIN T., GOBRON T. ULLMO D.	Lax connection and conserved quantities of quadratic mean field games	J. Math. Phys. 62	083302	(arXiv:2008.07766)(DOI:10.1063/5.0039742)
2021	B/C	CEBEIRO J., TARPAU C. , MORVIDONE M., RUBIO D., NGUYEN M.K.	On a three-dimensional Compton scattering tomography system with fixed source.	Inverse problems 37(5)	054001	(arXiv:2006.14192)(DOI:10.1088/1361-6420/abf0f0)
2021	B/C	CHAN A., DE LUCA A. , CHALKER J.T.	Spectral Lyapunov exponents in chaotic and localized many-body quantum systems.	Phys. Rev. Research 3	023118	(arXiv:2012.05295)(DOI:10.1103/PhysRevResearch.3.023118)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2021	B/C	DE CONINCK J., <u>DUNLOP F.</u>, <u>HUILLET T.</u>	Composite states of wetting.	Physica A: Statistical Mechanics and its Applications 571	125823	(arXiv:2010.11058)(DOI: 10.1016/j.physa.2021.125823)
2021	B/C	DE NARDIS J., GOPALAKRISHNAN S., VASSEUR R., WARE B.	Stability of Superdiffusion in Nearly Integrable Spin Chains.	Phys. Rev. Lett. 127	057201	(arXiv:2102.02219)(DOI: 10.1103/PhysRevLett.127.057201)
2021	B/C	<u>GONCALVES B.</u>, <u>HUILLET T.</u>	A generating function approach to Markov chains undergoing binomial catastrophes.	J. Stat. Mech. 2021	033402	(arXiv:2101.03851)(DOI: 10.1088/1742-5468/abdfcb)
2021	B/C	<u>GONCALVES B.</u>, <u>HUILLET T.</u>, <u>LOCHERBACH E.</u>	On population growth with catastrophes.	Stochastic Models	1532-4214	(arXiv:2007.03277)(DOI: 10.1080/15326349.2021.2020660)
2021	B/C	<u>GONCALVES B.</u>, <u>HUILLET Th.</u>	Keeping random walks safe from extinction and overpopulation in the presence of life-taking disasters.	Mathematical Population Studies 28	1976476	(DOI: 10.1080/08898480.2021.1976476)
2021	B/C	<u>HUILLET T.</u>, MARTINEZ S.	Revisiting John Lamperti's maximal branching process.	Stochastics		(arXiv:1911.07730)(DOI: 10.1080/17442508.2021.1935949)
2021	B/C	<u>HUILLET T.</u>, MOHLE M.	Asymptotic genealogies for a class of generalized Wright–Fisher models.	Modern Stochastics: Theory and Applications 9(1)	1-27	(arXiv:2106.10939)(DOI: 10.15559/21-VMSTA196)
2021	B/C	RAHMANI P., <u>PERUANI F.</u>, ROMANCZUK P.	Topological flocking models in spatially heterogeneous environments.	Communications Physics 4	206	(arXiv:2010.05902)(DOI: 10.1038/s42005-021-00708-y)
2021	B/C	TARPAU C., CEBEIRO J., <u>ROLLET G.</u>, NGUYEN M.K., DUMAS L.	Analytical reconstruction formula with efficient implementation for a modality of Compton scattering tomography with translational geometry.	Inverse Problems & Imaging	2021075	(DOI: 10.3934/ipi.2021075)
2021	B/C	<u>TRUONG T.T.</u>	Moyal equation—Wigner distribution functions for anharmonic oscillators.	J. Math. Phys. 62	102103	(DOI: 10.1063/5.0021132)
2021	D	BI H., DI <u>VOLO M.</u>, <u>TORCINI A.</u>	Asynchronous and Coherent Dynamics in Balanced Excitatory-Inhibitory Spiking Networks.	Front. Syst. Neurosci. 15	135	(arXiv:2108.13666)(DOI: 10.3389/fnsys.2021.752261)
2021	D	CHEPELIANSKII A.D., MAJUMDAR S.N., <u>SCHAWÉ H.</u>, TRIZAC E.	One-dimensional Monte Carlo dynamics at zero temperature.	J. Phys. A: Math. Theor. 54(48)	485001	(arXiv:2110.04188)(DOI: 10.1088/1751-8121/ac2dc2)
2021	D	CHEPIZHKO A., SAINTILLAN D., <u>PERUANI F.</u>	Revisiting the emergence of order in active matter.	Soft Matter 2021, Advance Article		(DOI: 10.1039/D0SM01220C)
2021	D	CISZAK M., OLMÍ S., INNOCENTI G., <u>TORCINI A.</u>, MARINO F.	Collective canard explosions of globally-coupled rotators with adaptive coupling.	Chaos, Solitons & Fractals 153(1)	111592	(arXiv:2110.10473)(DOI: 10.1016/j.chaos.2021.111592)
2021	D	DEAN D.S., MAJUMDAR S.N., <u>SCHAWÉ H.</u>	Position distribution in a generalized run-and-tumble process.	Phys. Rev. E 103	012130	(arXiv:2009.01487)(DOI: 10.1103/PhysRevE.103.012130)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2021	D	DI VOLO M., DESTEXHE A.	Optimal responsiveness and information flow in networks of heterogeneous neurons.	Scientific Reports 11	17611	(arXiv:2005.05596)(DOI: 10.1038/s41598-021-96745-2)
2021	D	DIEP H.T., DESGRANGES G.	Dynamics of the price behavior in stock markets: A statistical physics approach.	Physica A 570	125813	(arXiv:1912.11665)(DOI: 10.1016/j.physa.2021.125813)
2021	D	GANDICA Y., LANSING J.S., CHUNG N.N., THURNER S., CHEW L.Y.	Bali's Ancient Rice Terraces: A Hamiltonian Approach.	Phys. Rev. Lett. 127	168301	(arXiv:2103.04466)(DOI: 10.1103/PhysRevLett.127.168301)
2021	D	GASCUEL H., PERUANI F., BON R.	Identifying interaction neighbours in animal groups.	Animal Behaviour 174	97-104	(DOI: 10.1016/j.anbehav.2021.01.019)
2021	D	GOLDOBIN D.S., DI VOLO M., TORCINI A.	Reduction Methodology for Fluctuation Driven Population Dynamics.	Phys. Rev. Lett. 127	038301	(arXiv:2101.11679)(DOI: 10.1103/PhysRevLett.127.038301)
2021	D	GOMEZ NAVA L., GOUDON T., PERUANI F.	Kinetic and macroscopic models for active particles exploring complex environments with an internal navigation control system.	Mathematical Models and Methods in Applied Sciences 31(08)	1691-1717	(DOI: 10.1142/S0218202521500366)
2021	D	MAJUMDAR S.N., MORI F., SCHAWÉ H., SCHEHR G.	Mean perimeter and area of the convex hull of a planar Brownian motion in the presence of resetting.	Phys. Rev. E 103	022135	(arXiv:2011.06668)(DOI: 10.1103/PhysRevE.103.022135)
2021	D	MANOS T., DIAZ PIER S., TASS P.A.	Long-term desynchronization by coordinated reset stimulation in a neural network model with synaptic and structural plasticity.	Frontiers in Physiology		(DOI: 10.3389/fphys.2021.716556)
2021	D	OTTE S., PEREZ-IPINA E., POINTER-BRES R., CZERUCKA D., PERUANI F.	Statistics of pathogenic bacteria in the search of host cells.	Nature Communications 12	1990	(DOI: 10.1038/s41467-021-22156-6)
2021	D	PERRIER R., GANDICA Y., HERNANDEZ L.	The consequences of hesitation: Axelrod model with intrinsic noise.	PLoS ONE 16(11)	e0259295	(arXiv:2106.14304)(10.1371/journal.pone.0259295)
2021	D	POPOVYCH O.V., JUNG K., MANOS T., DIAZ PIER S., HOFFSTAEDTER F., SCHREIBER J., THOMAS YEO B.T., EICKHOFF S.	Inter-subject and inter-parcellation variability of resting-state whole-brain dynamical modeling.	NeuroImage 236	118201	(DOI: 10.1016/j.neuroimage.2021.118201)
2021	D	REYERO T.M., BEIRO M.G., ALVAREZ-HAMELIN J.I., HERNANDEZ L., KOTZINOS D.	Evolution of the political opinion landscape during electoral periods.	EPJ data Science 10	31	(arXiv:2011.09538)(DOI: 10.1140/epjds/s13688-021-00285-8)
2021	D	RÖMER R.A., RÖMER N.S., WALLIS A.K.	Flexibility and mobility of SARS-CoV-2-related protein structures.	Scientific Reports 11	4257	(DOI: 10.1038/s41598-021-82849-2)
2021	D	SCHAWÉ H., FONTAINE S., HERNANDEZ L.	When network bridges foster consensus. Bounded confidence models in networked societies.	Phys. Rev. Research 3	023208	(arXiv:2102.10910)(DOI: 10.1103/PhysRevResearch.3.023208)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2021	D	STUCCHI M., PITTORINO F., DI VOLO M., VEZZANI A., BURIONI R.	Order symmetry breaking and broad distribution of events in spiking neural networks with continuous membrane potential.	Chaos, Solitons and Fractals 147	110946	(arXiv:2104.03140)(DOI: 10.1016/j.chaos.2021.110946)
2020	A	ASHOURI A., MAHDAVIFAR S., MISGUICH G., VAHEDI J.	Concurrence and Quantum Discord in the Eigenstates of Chaotic and Integrable Spin Chains.	Annalen der Physik 532(8)	1900515	(DOI: 10.1002/andp.201900515)
2020	A	BAILLY-REYRE A., DIEP H.T.	Nematic and Smectic Phases: Dynamics and Phase Transition.	Symmetry 2020(12)	1574	(DOI: 10.3390/sym12091574)
2020	A	BRUNE M., PAPOULAR D.	Evaporative cooling of a Rydberg atom chain to near its ground state.	Phys. Rev. Research 2	023014	(arXiv:1909.02367)(DOI: 10.1103/PhysRevResearch.2.023014)
2020	A	CAPPONI S., FROMHOLZ P., LECHEMINANT P., TOTSUKA K.	Symmetry-protected topological phases in a two-leg SU(N) spin ladder with unequal spins.	Phys. Rev. B 101	195121	(arXiv:1909.13553)(DOI: 10.1103/PhysRevB.101.195121)
2020	A	COLIN S., MATZKIN A.	Non-locality and time-dependent boundary conditions: A Klein-Gordon perspective.	Europhysics Letters 130(5)	50003	(arXiv:2002.01870)(DOI: 10.1209/0295-5075/130/50003)
2020	A	COLLURA M., DE LUCA A., CALABRESE P., DUBAIL J.	Domain wall melting in the spin-1/2 XXZ spin chain: Emergent Luttinger liquid with a fractal quasiparticle charge.	Phys. Rev. B 102	180409	(arXiv:2001.04948)(DOI: 10.1103/PhysRevB.102.180409)
2020	A	DE LUCA A., BASTIANELLO A.	Entanglement front generated by an impurity traveling in an isolated many-body quantum system.	Phys. Rev. B 101	085139	(arXiv:1909.07341)(DOI: 10.1103/PhysRevB.101.085139)
2020	A	FAIZI NAMARVAR O., MISSAOUI A., MAGAUD L., MAYOU D., TRAMBLY DE LAISSARDIERE G.	Electronic structure and quantum transport in twisted bilayer graphene with resonant scatterers.	Phys. Rev. B 101	245407	(arXiv: 1402.5879)(DOI: 10.1103/PhysRevB.101.245407)
2020	A	FONTAINE Q., LARRE P-E., LERARIO G., BIENAIME T., PIGEON S., FACCIO D., CARUSOTTO L., GIACOBINO E., BRAMATI A., GLORIEUX Q.	Interferences between Bogoliubov excitations and their impact on the evidence of superfluidity in a paraxial fluid of light.	Phys. Rev. Research 2(4)	043297	(arXiv:2005.14328)(DOI: 10.1103/PhysRevResearch.2.043297)
2020	A	FROMHOLZ P., LECHEMINANT P.	Symmetry-protected topological phases in the SU(N) Heisenberg spin chain: A Majorana fermion approach.	Phys. Rev. B 102	94410	(arXiv:2006.13553)(DOI: 10.1103/PhysRevB.102.094410)
2020	A	GUTIERREZ DE LA CAL X., ALKHATEEB M., PONS M. MATZKIN A., SOKOLOVSKI D.	Klein paradox for bosons, wave packets and negative tunnelling times.	Scientific Reports 10(1)	19225	(DOI: 10.1038/s41598-020-76065-7)
2020	A	HONECKER A., RICHTER J., SCHNACK J., WIETECK A.	Loop-gas description of the localized-magnon states on the kagome lattice with open boundary conditions.	Condensed Matter Physics 23(4)	43712	(arXiv:2008.10614)(DOI: 10.5488/CMP.23.43712)
2020	A	KUNIBA A., MISGUICH G., PASQUIER V.	Generalized hydrodynamics in box-ball system.	J. Phys. A: Math. Theor. 53(40)	404001	(arXiv:2004.01569)(DOI: 10.1088/1751-8121/abab9)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2020	A	LACROIX A., TRAMBLY DE LAISSARDIERE G., QUEMERAIS P., JULIEN J-P., MAYOU D.	Modeling of Electronic Mobilities in Halide Perovskites: Adiabatic Quantum Localization Scenario.	Phys. Rev. Lett. 124	196601	(arXiv:1912.03198)(DOI: 10.1103/PhysRevLett.124.196601)
2020	A	LANDA H., SCHIRO M., MISGUICH G.	Multistability of Driven-Dissipative Quantum Spins.	Phys. Rev. Lett. 124	043601	(arXiv:1905.10349)(DOI: 10.1103/PhysRevLett.124.043601)
2020	A	LANDA H., SCHIRO M., MISGUICH G.	Correlation-induced steady states and limit cycles in driven dissipative quantum systems.	Phys. Rev. B 102	064301	(arXiv:2001.05474)(DOI: 10.1103/PhysRevB.102.064301)
2020	A	LIU J., MAO X., ZHONG J., RÖMER R.A.	Localization, phases, and transitions in three-dimensional extended Lieb lattices.	Phys. Rev. B 102	174207	(arXiv:2004.08042)(DOI: 10.1103/PhysRevB.102.174207)
2020	A	MAO X., LIU J., ZHONG J., RÖMER R.A.	Disorder effects in the two-dimensional Lieb lattice and its extensions.	Phys. E Low-Dimensional Syst. Nanostructures 124	114340	(arXiv:2001.05830)(DOI: 10.1016/j.physe.2020.114340)
2020	A	MATZKIN A.	Weak values from path integrals.	Phys. Rev. Research 2	032048	(arXiv:2002.00832)(DOI: 10.1103/PhysRevResearch.2.032048)
2020	A	MATZKIN A., SOKOLOVSKI D.	Wigner's friend, Feynman's paths and material records.	Europhysics Letters 131(4) <i>Editor's Suggestion</i>	40001	(arXiv:2009.01113)(DOI: 10.1209/0295-5075/131/40001)
2020	A	MATZKIN A., SOKOLOVSKI D.	Wigner Friend scenarios with non-invasive weak measurements.	Phys. Rev. A 102	062204	(arXiv:2008.09003)(DOI: 10.1103/PhysRevA.102.062204)
2020	A	MISGUICH G., JOLICOEUR T., MIZUSAKI T.	Bubble phase at $\nu=1/3$ for a spinless hollow-core interaction.	Phys. Rev. B 102	245107	(arXiv:1703.07095)(DOI: 10.1103/PhysRevB.102.245107)
2020	A	OSWALD J., RÖMER R.A.	Microscopic details of stripes and bubbles in the quantum Hall regime.	Phys. Rev. B 102	121305	(arXiv:2001.07542)(DOI: 10.1103/PhysRevB.102.121305)
2020	A	PHUNG T.T., PETERS R., HONECKER A., TRAMBLY DE LAISSARDIERE G., VAHEDI J.	Spin-caloritronic transport in hexagonal graphene nanoflakes.	Phys. Rev. B 102	035160	(arXiv:2003.01139)(DOI: 10.1103/PhysRevB.102.035160)
2020	A	RACZKOWSKI M., PETERS R., PHUNG T.T., TAKEMORI N., ASSAAD F.F., HONECKER A., VAHEDI J.	Hubbard model on the honeycomb lattice: From static and dynamical mean-field theories to lattice quantum Monte Carlo simulations.	Phys. Rev. B 101	125103	(arXiv:1908.04307)(DOI: 10.1103/PhysRevB.101.125103)
2020	A	SCHNACK J., SCHULENBURG J., HONECKER A., RICHTER J.	Magnon crystallization in the kagome lattice antiferromagnet.	Phys. Rev. Lett. 125	117207	(arXiv:1910.10448)(DOI: 10.1103/PhysRevLett.125.117207)
2020	A	SHARAFULLIN I. F., NUGUMANOV A. G., NUGAEVA N. M., DIEP H. T.	Skyrmions and Phase Transitions in a Ferromagnetic/Ferroelectric Superlattices with Triangular Lattice.	IEEE Magnetism Letters 11	1-5	(DOI: 10.1109/LMAG.2020.3009635)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2020	A	SHARAFULLIN I., <u>DIEP</u> H.T.	Skyrmion Crystal and Phase Transition in Magneto-Ferroelectric Superlattices: Dzyaloshinskii-Moriya Interaction in a Frustrated J1 - J2 Model.	Symmetry 2020, 12(1)	26	(DOI:10.3390/sym12010026)
2020	A	SHARAFULLIN I., <u>DIEP</u> H.T.	Elementary excitations in anisotropic nanofilms of multiferroics with competing interactions at the interface.	Letters on Materials 10(2)	211-216	(DOI:10.22226/2410-3535-2020-2-211-216)
2020	A	SHARAFULLIN I.F., NUGUMANOV A.G., YULDASHEVA A.R., NUGAEVA N.M., KHARRASOV M.Kh., <u>DIEP</u> H.T.	Monte Carlo study of phase transitions and Skyrmion crystal in magneto-antiferroelectric heterostructures with triangular lattice.	Chelyabinsk Physical and Mathematical Journal 2020(5), iss. 2	202-210	(DOI:10.24411/2500-0101-2020-15207)
2020	A	THANH NGO V., NGUYEN P.T., <u>DIEP</u> H.T.	Dynamics leading to Smectic Phase and Nature of Multiple Partial Phase Transitions at Low Temperatures by Wang-Landau Method.	Entropy 22(11)	1232	(DOI:10.3390/e22111232)
2020	A	<u>VENKATESWARLU S., HONECKER A., TRAMBLY DE LAISSARDIERE G.</u>	Electronic localization in twisted bilayer MoS2 with small rotation angle.	Phys. Rev. B 102(8)	081103	(arXiv:2005.13054)(DOI:10.1103/PhysRevB.102.081103)
2020	A	WAEGELL M., <u>MATZKIN A.</u>	Nonlocal Interferences Induced by the Phase of the Wavefunction for a Particle in a Cavity with Moving Boundaries.	Quantum Reports 2(4)	514-528	(arXiv:1909.06465)(DOI:10.3390/quantum2040036)
2020	A	XIA J., ZHANG X., EZAWA M., TRETYAKOV O.A., HOU Z., WANG W., ZHAO G., LIU X., <u>DIEP</u> H.T., ZHOU Y.	Current-driven skyrmionium in a frustrated magnetic system.	Appl. Phys. Lett. 117	012403	(arXiv:2005.01403)(DOI:10.1063/5.0012706)
2020	B	<u>AVAN J., FRAPPAT L., RAGOUCY E.</u>	Algebraic structure of classical integrability for complex sine-Gordon.	SciPost Phys. 8	033	(arXiv:1911.06720)(DOI:10.21468/SciPostPhys.8.3.033)
2020	B	<u>AVAN J., FRAPPAT L., RAGOUCY E.</u>	On abelianity lines in elliptic W-algebras.	SIGMA 16	094	(arXiv:2005.03579)(DOI:10.3842/SIGMA.2020.094)
2020	B	BASTIANELLO A., <u>DE LUCA A., DOYON B., DE NARDIS J.</u>	Thermalization of a Trapped One-Dimensional Bose Gas via Diffusion.	Phys. Rev. Lett. 125	240604	(arXiv:2007.04861)(DOI:10.1103/PhysRevLett.125.240604)
2020	B	BASTIANELLO A., <u>DE NARDIS J., DE LUCA A.</u>	Generalised hydrodynamics with dephasing noise.	Phys. Rev. B 102 <i>Editor's Suggestion</i>	161110	(arXiv:2003.01702)(DOI:10.1103/PhysRevB.102.161110)
2020	B	<u>CANTINI L., COLOMO F., PRONKO A.G.</u>	Integral formulas and antisymmetrization relations for the six-vertex model.	Ann. Henri Poincaré 21	865-884	(arXiv:1906.07636)(DOI:10.1007/s00023-019-00856-6)
2020	B	DEL VECCHIO DEL VECCHIO G., BASTIANELLO A., <u>DE LUCA A., MUSSARDO G.</u>	Exact out-of-equilibrium steady states in the semiclassical limit of the interacting Bose gas.	SciPost Phys. 9	002	(arXiv:2002.01423)(DOI:10.21468/SciPostPhys.9.1.002)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2020	B	MORIN-DUCHESNE A., HAGENDORF C., CANTINI L.	Boundary emptiness formation probabilities in the six-vertex model at $\Delta = -1/2$.	J. Phys. A: Math. Theor. 53	255202	(arXiv:1911.08972)(DOI:10.1088/1751-8121/ab8507)
2020	B	TARPAU C., CEBEIRO J., MORVIDONE M.A., NGUYEN M.K.	A New Concept of Compton Scattering Tomography and the Development of the Corresponding Circular Radon Transform.	IEEE Transactions on Radiation and Plasma Medical Sciences 4(4)	433-440	DOI: 10.1109/TRPMS.2019.2943555)
2020	B	TARPAU C., CEBEIRO J., NGUYEN M.K., ROLLET G., MORVIDONE M.A.	Analytic inversion of a Radon transform on double circular arcs with applications in Compton Scattering Tomography.	IEEE Transactions on Computational Imaging (Early Access)	1-1	(arXiv:1912.10797)(DOI:10.1109/TCI.2020.2999672)
2020	B	TARPAU C., NGUYEN M.K.	Compton scattering imaging system with two scanning configurations.	J. of Electronic Imaging 29(1)	013005	(hal-02467915)(DOI:10.1117/1.JEI.29.1.013005)
2020	B/C	TRUONG T.T.	Function Reconstruction from Reflection Symmetric Radon Data .	Symmetry 2020 12(6)	956	(DOI:10.3390/sym12060956)
2020	C	BONNEMAIN T., GOBRON T. ULLMO D.	Schrödinger approach to Mean Field Games with negative coordination.	SciPost Phys. 9	059	(arXiv:2006.01221)(DOI:10.21468/SciPostPhys.9.4.059)
2020	C	BONNEMAIN T., GOBRON T. ULLMO D.	Universal behavior in non stationary Mean Field Games.	Physics Letters A 384(23)	126608	(arXiv:1907.05374)(DOI:10.1016/j.physleta.2020.126608)
2020	C	DE CONINCK J., FERNANDEZ-TOLEDANO J.C., DUNLOP F., HUILLET T., SODJI A.	Shape of pendent droplets under a tilted surface.	Physica D: Nonlinear Phenomena	132765	(arXiv:2001.11233)(DOI:10.1016/j.physd.2020.132765)
2020	C	DUNLOP F., FATOLLAHI A.H., HAJIRAHIMI M., HUILLET T.	Identities for droplets with circular footprint on tilted surfaces.	Royal Society Open Science 7(11)	201534	(arXiv:2010.14143)(DOI:10.1098/rsos.201534)
2020	C	GONCALVES B., HUILLET T.	Scaling features of two special Markov chains involving total disasters.	Journal of Statistical Physics 178	499-531	(arXiv:2101.03853)(DOI:10.1007/s10955-019-02439-5)
2020	C	HUILLET T.	On Random Population Growth Punctuated by Geometric Catastrophic Events.	Contemporary Mathematics 1(5)	471	(arXiv:2007.03277)(DOI:10.37256/cm.152020600)
2020	C	HUILLET T.	Statistics of Branched Populations Split into Different Types.	Applications and Applied Mathematics 15(2)	764-800	
2020	C	HUILLET T.	On new mechanisms leading to heavy-tailed distributions related to the ones of Yule-Simon.	Indian J. Pure and Appl. Math. 51(1)		(DOI:10.1007/s13226-020-0403-y)
2020	C	HUILLET T., MARTINEZ S.	Truncation in Duality and Intertwining Kernels.	Markov Processes Relat. Fields 26	423-445	(arXiv:1911.01415)
2020	C	KOUKIOU F.	Freezing and low temperature entropy: The case of mean-field Gaussian model.	Journal of Mathematical Physics 61	113302	(DOI:10.1063/1.5063727)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2020	D	ADAM I., CECCHINI G., FANELLI D., KREUZ T., LIVI R., <u>DI VOLO M.</u>, ALLEGRA MASCARO A.L., CONTI E., SCAGLIONE A., SILVESTRI L., SAVERIO PAVONE F.	Inferring network structure and local dynamics from neuronal patterns with quenched disorder.	Chaos, Solitons & Fractals 140	110235	(DOI:10.1016/j.chaos.2020.110235)
2020	D	<u>BI H.</u>, <u>SEGNERI M.</u>, <u>DI VOLO M.</u>, <u>TORCINI A.</u>	Coexistence of fast and slow gamma oscillations in one population of inhibitory spiking neurons.	Phys. Rev. Research 2	013042	(arXiv:1907.00230) (DOI:10.1103/PhysRevResearch.2.013042)
2020	D	CARLU M., CHEHAB O., DALLA PORTA L., DEPANNAECKER D., HERICE C., JEDYNAK M., KOKSAL ERSOZ E., MURATORE P., SOUIHEL S., CAPONE C., ZERLAUT Y., DESTEXHE A., <u>DI VOLO M.</u>	A mean-field approach to the dynamics of networks of complex neurons, from nonlinear Integrate-and-Fire to Hodgkin-Huxley models.	Journal of Neurophysiology 123(3)	1042-1051	(DOI:10.1152/jn.00399.2019)
2020	D	CENI A., OLMÍ S., <u>TORCINI A.</u>, ANGULO-GARCIA D.	Cross frequency coupling in next generation inhibitory neural mass models .	Chaos 30	053121	(arXiv:1908.07954) (DOI:10.1063/1.5125216)
2020	D	CISZAK M., MARINO F., <u>TORCINI A.</u>, OLMÍ S.	Emergent excitability in populations of nonexcitable units.	Phys. Rev. E 102(5)	050201	(arXiv:2010.06249)(DOI:10.1103/PhysRevE.102.050201)
2020	D	COQUAND O., ESSAFI K., <u>KOWNACKI J.P.</u>, MOUHANNA D.	Universal behaviors in the wrinkling transition of disordered membranes.	Phys. Rev. E 101	042602	(arXiv:1909.13268)(DOI:10.1103/PhysRevE.101.042602)
2020	D	<u>GANDICA Y.</u>, BEREAU S., GNABO J.Y.	A multilevel analysis of financial institutions' systemic exposure from local and system-wide information.	Scientific Reports 10	17657	(DOI:10.1038/s41598-020-74259-7)
2020	D	GROSSMANN R., ARANSON I.S., <u>PERUANI F.</u>	A particle-field approach bridges phase separation and collective motion in active matter.	Nature Communications 11	5365	(DOI:10.1038/s41467-020-18978-5)
2020	D	HARTMANN A.K., MAJUMDAR S.N., <u>SCHAWÉ H.</u>, SCHEHR G.	The convex hull of the run-and-tumble particle in a plane.	J. Stat. Mech. 2020(5)	053401	(arXiv:1912.08778)(DOI: 10.1088/1742-5468/ab7c5f)
2020	D	<u>HERNANDEZ L.</u>, <u>SCHAWÉ H.</u>	Collective effects of the cost of opinion change.	Scientific reports 10	13825	(arXiv:2007.00432)(DOI:10.1038/s41598-020-70809-1)
2020	D	HOLME P., <u>GANDICA Y.</u>	The free and freer XY models.	Phys. Rev. E 101	032311	(arXiv:2001.00379)(DOI:10.1103/PhysRevE.101.032311)
2020	D	KAUFMAN M. , KAUFMAN S., <u>DIEP H.T.</u>	Multi-Group Conflict Paths: Anticipatory Scenarios of Attitudes and Outcomes.	Journal of policy and complex systems 5(2)	5-21	(DOI:10.13140/RG.2.2.13598.89922)
2020	D	KAUFMAN M., <u>DIEP H.T.</u>, KAUFMAN S.	Sociophysics Analysis Of Multi-Group Conflicts.	Entropy 2020, 22	214	(DOI:10.3390/e22020214)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2020	D	KRABBE P., SCHAWÉ H. , HARTMANN A.K.	Number of longest increasing subsequences.	Phys. Rev. E 101	062109	(arXiv:2003.12847)(DOI: 10.1103/PhysRevE.101.062109)
2020	D	MOGES H., MANOS T. , SKOKOS C.	On the behavior of the Generalized Alignment Index (GALI) method for regular motion in multidimensional Hamiltonian systems.	Nonlinear Phenomena in Complex Systems 23(2)	153-164	(arXiv:2001.00803)(DOI: 10.33581/1561-4085-2020-23-2-153-164)
2020	D	PAYRATO-BORRAS C. , HERNANDEZ L. , MORENO Y.	Measuring nestedness: A comparative study of the performance of different metrics.	Ecology and Evolution 10(21)	11906-11921	(arXiv:2002.00534)(DOI: 10.1002/ece3.6663)
2020	D	RETUREAU R., FOLLOPE N., ELBAHNSI A., OGUEY C. , HARTMANN B.	A dynamic view of DNA structure within the nucleosome: Biological implications.	Journal of Structural Biology 211(1)	107511	(DOI: 10.1016/j.jsb.2020.107511)
2020	D	RICARDO G. MENDOCA J., SCHAWÉ H. , HARTMANN A.K.	On the asymptotic behavior of the length of the longest increasing subsequences of random walks.	Phys. Rev. E 101(3)	032102	(arXiv:1907.00486)(DOI: 10.1103/PhysRevE.101.032102)
2020	D	SCHAWÉ H. , HARTMANN A.	Large deviations of connected components in the stochastic block model.	Phys. Rev. E 102(5)	052108	(arXiv:2003.03415)(DOI: 10.1103/PhysRevE.102.052108)
2020	D	SCHAWÉ H. , HARTMANN A.K.	Large deviations of a random walk model with emerging territories.	Phys. Rev. E 102	062141	(arXiv:2010.00325)(DOI: 10.1103/PhysRevE.102.062141)
2020	D	SCHAWÉ H. , HERNANDEZ L.	When open mindedness hinders consensus.	Scientific Reports 10	8273	(arXiv:2001.06877)(DOI: 10.1038/s41598-020-64691-0)
2020	D	SEGNERI M. , BI H., OLMÍ S., TORCINI A.	Theta-nested gamma oscillations in next generation neural mass models.	Frontiers in Computational Neuroscience 14	47	(arXiv:2003.04000)(DOI: 10.3389/fncom.2020.00047)
2020	D	TAHER H., TORCINI A. , OLMÍ S.	Exact neural mass model for synaptic-based working memory.	PLOS Computational Biology 16(12)	e1008533	(arXiv:2010.07071)(DOI: 10.1371/journal.pcbi.1008533)
2020	D	ULLNER E., POLITI A., TORCINI A.	Quantitative and qualitative analysis of asynchronous neural activity.	Phys. Rev. Research 2	023103	(arXiv:1912.09207)(DOI: 10.1101/2019.12.19.882456)
2019	A	BIDZHIEV K., MISGUICH G. , SALEUR H.	Out-of-equilibrium transport in the interacting resonant level model: Surprising relevance of the boundary sine-Gordon model.	Phys. Rev. B 100	075157	(arXiv:1810.11058)(DOI: 10.1103/PhysRevB.100.075157)
2019	A	BIELLA A., COLLURA M., ROSSINI D., DE LUCA A. , MAZZA L.	Ballistic transport and boundary resistances in inhomogeneous quantum spin chains.	Nature Communications 10	4820	(arXiv:1905.00088)(DOI: 10.1038/s41467-019-12784-4)
2019	A	DIEP H.T.	Phase Transition in Frustrated Magnetic Thin Film - Physics at Phase Boundaries.	Entropy 21(2)	175	(DOI: 10.3390/e21020175)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2019	A	EL HOG S., KATO F., KOIBUCHI H., DIEP H.T.	Skymions on 2d elastic surfaces with fixed boundary frames.	J.M.M.	166095	(arXiv:1910.01760) (DOI:10.1016/j.jmmm.2019.166095)
2019	A	FRIEDMAN A.J., CHAN A., DE LUCA A., CHALKER J.T.	Spectral statistics and many-body quantum chaos with conserved charge.	Phys. Rev. Lett. 123	210603	(arXiv:1906.07736) (DOI:10.1103/PhysRevLett.123.210603)
2019	A	FROMHOLZ P., CAPPONI S., LECHEMINANT P., PAPOULAR D., TOTSUKA K.	Haldane phases with ultracold fermionic atoms in double-well optical lattices.	Phys. Rev. B 99	054414	(DOI:10.1103/PhysRevB.99.054414)
2019	A	GHASSEN J., KHABTHANI J., TRAMBLY DE LAISSARDIERE G., MAYOU D.	Quantum localization and electronic transport in covalently functionalized carbon nanotubes.	J. Phys: Condens. Matter 32(11)	115301	(arXiv:1908.00952) (DOI:10.1088/1361-648X/ab5a2d)
2019	A	MATZKIN A.	Weak Values and Quantum Properties.	Foundations of Physics 49(3)	298-316	(arXiv:1808.09737) (DOI:10.1007/s10701-019-00245-3)
2019	A	MIRMASOUDI F., AHADPOUR S., VAHEDI J., MAHDAVIFAR S.	The Loschmidt-echo dynamics in a quantum chaos model.	Physica Scripta 94(5)	055207	(DOI:10.1088/1402-4896/ab0582)
2019	A	MISGUICH G., PAVLOFF N., PASQUIER V.	Domain wall problem in the quantum XXZ chain and semiclassical behavior close to the isotropic point.	SciPost Phys. 7	025	(arXiv:1905.08756)(DOI:10.21468/SciPostPhys.7.2.025)
2019	A	MISSAOUI A., KHABTHANI J.J., TRAMBLY DE LAISSARDIERE G., MAYOU D.	Two-dimensional electronic transport in rubrene: the impact of inter-chain coupling.	Entropy 21(3)	233	(DOI:10.3390/e21030233)
2019	A	SHARAFULLIN I.F., KHARRASOV M.Kh., DIEP H.T.	Dzyaloshinskii-Moriya interaction in magnetoferroelectric superlattices: Spin waves and skyrmions.	Phys. Rev. B99(21)	214420	(DOI:10.1103/PhysRevB.99.214420)
2019	A	VACCARELLI O., HONECKER A., GIURA P., BENEUT K., FAK B., ROUSSE G., RADTKE G.	Triplet excitations in the frustrated spin ladder Li2Cu2O(SO4)2.	Phys. Rev. B 99	064416	(DOI:10.1103/PhysRevB.99.064416)
2019	A	WIETEK A., CORBOZ P., WESSEL S., NORMAND B., MILA F., HONECKER A.C302	Thermodynamic properties of the Shastry-Sutherland model throughout the dimer-product phase.	Phys. Rev. Research 1	033038	(arXiv:1907.00008) (DOI:10.1103/PhysRevResearch.1.033038)
2019	B	AVAN J., FRAPPAT L., RAGOUCY E.	Elliptic deformation of WN-algebras.	SciPost 6(5)	054	(arXiv:1810.11410) (DOI:10.21468/SciPostPhys.6.5.054)
2019	B	TRUONG T.T., NGUYEN M.K.	Compton scatter tomography in annular domains.	Inverse Problems 35(5)	054005	(DOI:10.1088/1361-6420/ab0b76)
2019	C	BONNEMAIN T., ULLMO D.	Mean field games in the weak noise limit : A WKB approach to the Fokker-Planck equation.	Physica A: Stat. Mech. and its Appl. 523	310-325	(arXiv:1804.03090) (DOI:10.1016/j.physa.2019.01.143)
2019	C	HUILLET T.	The height of the latest common ancestor of two randomly chosen leaves from a (sub-)critical Galton-Watson tree.	Advances in Applied Mathematics 106	28-36	(DOI:10.1016/j.aam.2019.02.001)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2019	C	HUILLET T.	Partitioning problems arising from independent shifted-geometric and exponential samples with unequal intensities.	International Journal of Statistics and Probability 8(6)	31-46	(DOI:10.5539/ijsp.v8n6p31)
2019	C	ULLMO D., SWIECICKI I., GOBRON T.	Quadratic mean field games.	Physics Reports		(arXiv:1708.07730) (DOI:10.1016/j.physrep.2019.01.001)
2019	D	CAPONE C., DI VOLO M., ROMAGNONI A., MATTIA M., DESTEXHE A.	State-dependent mean-field formalism to model different activity states in conductance-based networks of spiking neurons.	Phys. Rev. E 100(6)	062413	(DOI:10.1103/PhysRevE.100.062413)
2019	D	FOSTER D., KENNA R., PINETTES C.	Use of the Complex Zeros of the Partition Function to Investigate the Critical Behavior of the Generalized Interacting Self-Avoiding Trail Model.	Entropy 21(2)	153	(DOI:10.3390/e21020153)
2019	D	HAIMERL C., ANGULO-GARCIA D., VILETTE V., REICHINNEK S., TORCINI A., COSSART R., MALVACHE A.	Internal representation of hippocampal neuronal population span a time-distance continuum.	Proceedings of the National Academy of Sciences	201718518	(DOI:10.1073/pnas.1718518116)
2019	D	LUCCIOLI S., ANGULO GARCIA D., TORCINI A.	Neural activity of heterogeneous inhibitory spiking networks with delay.	Phys. Rev. E 99	052412	(arXiv:1902.03801)(DOI:10.1103/PhysRevE.99.052412)
2019	D	LUCCIOLI S., BEN-JACOB E., BARZILAI A., BONIFAZI P., TORCINI A.	Functional Cliques in Developmentally Correlated Neural Networks.	Nonlinear Dynamics in Computational Neuroscience	53-64	
2019	D	OLMI S., TORCINI A.	Chimera states in pulse coupled neural networks: the influence of dilution and noise.	Nonlinear Dynamics in Computational Neuroscience	65-79	
2019	D	PAYRATO BORRAS C., HERNANDEZ L., MORENO Y.	Breaking the Spell of Nestedness: The Entropic Origin of Nestedness in Mutualistic Systems.	Phys. Rev. X9(3)	031024	(arXiv:1711.03134) (DOI:10.1103/PhysRevX.9.031024)
2019	D	RETUREAU R., OGUEY C., MAUFFRET O., HARTMANN B.	Structural Explorations of NCp7–Nucleic Acid Complexes Give Keys to Decipher the Binding Process.	JMB 431(10)	1966-1980	(DOI:10.1016/j.jmb.2019.03.002)
2018	A	BIASI S., RAMIRO-MANZANO F., TURRI F., LARRE P.-E., GHULINYAN M., CARUSOTTO L., PAVESI L.	Hermitian and Non-Hermitian mode coupling in a micro-disk resonator due to stochastic surface roughness scattering.	IEEE Photonics Journal 11(2)		(DOI:10.1109/JPHOT.2018.2880281)
2018	A	CREPEL V., ESTIENNE B., BERNEVIG B.A., LECHEMINANT P., REGNAULT N.	Matrix Product State description of the Halperin States.	Phys. Rev. B 97	165136	(arXiv:1802.05278)(DOI:10.1103/PhysRevB.97.165136)
2018	A	DIEP H.T., EL HOG S., BAILLY-REYRE A.	Skyrmion crystals: Dynamics and phase transition.	AIP Advances 8	055707	(DOI:10.1063/1.5006269)
2018	A	DIEP H.T., EL HOG S., PUSZKARSKI H.	Spin-waves in thin films with Dzyaloshinskii-Moriya interaction.	AIP Advances 8	055706	(DOI:10.1063/1.5006268)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2018	A	DUPREY Q., KANJILAL S., SINHA U., HOME D., MATZKIN A.	The Quantum Cheshire Cat effect: Theoretical basis and observational implications.	Annals of Physics (2018)		(DOI:10.1016/j.aop.2018.01.011)
2018	A	DUPREY Q., MATZKIN A.	Reply to Comment on "Null weak values and the past of a quantum particle" by D. Sokolovski.	Phys. Rev. A 97	046103	(arXiv:1712.09387) (DOI:10.1103/PhysRevA.97.046103)
2018	A	EL HOG S., BAILLY-REYRE A., DIEP H.T.	Stability and phase transition of skyrmion crystals generated by Dzyaloshinskii-Moriya interaction.	JMMM 455	32-38	(arXiv:1702.06841)(DOI:10.1016/j.jmmm.2017.10.031)
2018	A	HUDER L., ARTAUD A., LE QANG T., TRAMBLY DE LAISSARDIERE G., JANSEN A.G.M., LAPERTOT G., CHAPELIER C., RENARD V.	Electronic Spectrum of Twisted Graphene Layers under Heterostrain.	Phys. Rev. Lett. 120	156405	(arXiv:1803.03505)
2018	A	HUDER L., TRAMBLY DE LAISSARDIERE G., LAPERTOT G., JANSEN A.G.M., CHAPELIER C., RENARD V.T.	Graphene on TaC: Air tight protection of a superconducting surface.	Carbon 140	592-595	(DOI:10.1016/j.carbon.2018.09.003)
2018	A	JAMES A.J.A., KONIK R.M., LECHEMINANT P., ROBINSON N.J., TSVELIK A.M.	Non-perturbative methodologies for low-dimensional strongly-correlated systems: From non-abelian bosonization to truncated spectrum methods.	Report. Progress of Physics	046002	(arXiv:1703.08421)
2018	A	LARRE P.-E., DELANDE D., CHERRORET N.	Postquench prethermalization in a disordered quantum fluid of light.	Phys. Rev. A 97	043805	(arXiv:1712.08533) (DOI:10.1038/PhysRevA.97.043805)
2018	A	MARTONE G.I., LARRE P.E., FABBRI A., PAVLOFF N.	Momentum distribution and coherence of a weakly interacting Bose gas after a quench.	Phys. Rev. A 98 (Editor's Suggestion)	063617	(arXiv:1810.01362)
2018	A	MATZKIN A.	Single particle nonlocality, geometric phases and time-dependent boundary conditions.	J. Phys. A: Math. Theor. 51(9)	095303	(arXiv:1706.08617)
2018	A	MATZKIN A., MOUSAVI S.V., WAEGELL M.	Nonlocality and local causality in the Schrödinger Equation with time-dependent boundary conditions.	Phys. Lett. A 382	3347	(arXiv:1806.01680) (DOI:10.1016/j.physleta.2018.09.043)
2018	A	MICHEL C., BOUGHDAD O., ALBERT M., LARRE P.-E., BELLEC M.	Superfluid motion and drag-force cancellation in a fluid of light.	Nature Communications 9	2018	(arXiv:1710.03081)
2018	A	MISSAOUI A., KHABTHANI J.J., JAIDANE N-E., MAYOU D., TRAMBLY DE LAISSARDIERE G.	Gap opening and transport in a graphene bilayer with selective functionalization.	J. Phys.: Cond. Mat. 30	195701	(arXiv:1712.00515)
2018	A	MOFIDNAKHAIE F., KHASTEDEL FUMANI F., MAHDAVIFAR S., VAHEDI J.	Quantum correlations in anisotropic XY-spin chains in a transverse magnetic field.	Phase Transitions 91		(DOI:10.1080/01411594.2018.1527916)
2018	A	MOSHFEHGH S., ASHOURI A., MAHDAVIFAR S., VAHEDI J.	Integrable-chaos crossover in the spin-1/2 XXZ chain with cluster interaction.	Physica A		(DOI:10.1016/j.physa.2018.10.046)
2018	A	PUSZKARSKI H., TOMCZAK P., DIEP H.T.	SWR Studies of Higher-Order Surface Anisotropy Terms in (Ga,Mn) As Thin Film.	Acta Physica Polonica A 133(3)	635-638	

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2018	A	SARTIPI Z., HAYATI A., VAHEDI J.	Thermoelectric efficiency in three-terminal graphene nano-junctions.	The Journal of Chemical Physics 149	114103	(DOI:10.1063/1.5044660)
2018	A	SARTIPI Z., VAHEDI J.	Enhancing thermoelectric properties through a three-terminal benzene molecule.	The Journal of Chemical Physics 148	174302	(DOI:10.1063/1.5018345)
2018	A	SHARAFULLIN I.F., KHARRASOV M.Kh., DIEP H.T.	Magneto-ferroelectric interaction in superlattices: Monte Carlo study of phase transitions.	J. Magnetism and Magn. Materials 476	258-267	(DOI:10.1016/j.jmmm.2018.12.088)
2018	A	SHARAFULLIN I.F., NUGUMANOV A.G., YULDASHEVA A., ZHARMUKHAMETOV A., DIEP H.T.	Modeling of magnetoelectric and surface properties in superlattices and nanofilms of multiferroics.	J. Magnetism and Magn. Materials 475	453-457	(DOI:10.1016/j.jmmm.2018.11.116)
2018	A	STAPMANN J., CORBOZ P., MILA F., HONECKER A., NORMAND B., WESSEL S.	Thermal Critical Points and Quantum Critical End Point in the Frustrated Bilayer Heisenberg Antiferromagnet.	Phys. Rev. Lett. 121	127201	(DOI:10.1103/PhysRevLett.121.127201) (arXiv:1805.11017)
2018	A	TOMCZAK P., DIEP H.T., JABLONSKI P., PUSZKARSKI H.	A Monte Carlo study of critical properties of strongly diluted magnetic semiconductor (Ga,Mn)As.	Acta Physica Polonica A 133(3)	514-516	(arXiv:1703.06636)(DOI:10.12693/APhysPolA.133.514)
2018	A	WEICHSELBAUM A., CAPPONI S., LECHEMINANT P., TSVELIK A.M., LAUHLI A.	Unified Phase Diagram of Antiferromagnetic SU(N) Spin Ladders.	Phys. Rev. B 98	085104	(arXiv:1803.06326)
2018	A	WESSEL S., NIESEN I., STAPMANN J., NORMAND B., MILA F., CORBOZ P., HONECKER A.	Thermodynamic properties of the Shastry-Sutherland model from quantum Monte Carlo simulations.	Phys. Rev. B 98	174432	(arXiv:1808.02043)(DOI:10.1103/PhysRevB.98.174432)
2018	B	AVAN J., CAUDRELIER V., CRAMPE N.	From Hamiltonian to zero curvature formulation for classical integrable boundary conditions.	J. Phys. A: Math. Theor. 51	30LT01	(arXiv:1802.07593)(DOI:10.1088/1751-8121/aac976)
2018	B	NGUYEN M.K., TRUONG T.T.	The Development of Radon Transforms associated to Compton Scatter Imaging Concepts.	Eurasian Journal of Mathematical and Computer Applications 6(1)	32-51	
2018	C	DE MAIO L., DUNLOP F.	Sessile drop on oscillating incline.	Journal of Applied Fluid Mechanics 11(6)	28380	(arXiv:1709.02124)
2018	C	HARTMANN A.K., HUILLET T.	Large-deviation properties of the extended Moran model.	Phys. Rev. E 98	042416	(arXiv:1710.07504) (DOI:10.1103/PhysRevE.98.042416)
2018	C	HUILLET T.	Karlin–McGregor Mutational Occupancy Problem Revisited.	J. Stat. Phys. 171(6)	1136-1149	(arXiv:1805.00765)(DOI:10.1007/s10955-018-2056-3)
2018	C	HUILLET T., MARTINEZ S.	Regenerative mutation processes related to the selfdecomposability of sibuya distributions.	Prob. In the Eng. And Inform. Sciences 33	291-325	(DOI:10.1017/S0269964818000189)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2018	D	COQUAND O., ESSAFI K., KOWNACKI J.P., MOUHANNA D.	Glassy phase in quenched disordered crystalline membranes.	Phys. Rev. E 97	0301025@	(DOI:10.1103/PhysRevE.97.030102) (arXiv:1708.08364)
2018	D	DI VOLO M., TORCINI A.	Transition from Asynchronous to Oscillatory Dynamics in Balanced Spiking Networks with Instantaneous Synapses.	Phys. Rev. Lett. 121	128301	(DOI:10.1103/PhysRevLett.121.128301)
2018	D	ELBAHNSI A., RETUREAU R., BAADEN M., HARTMANN B., OGUEY C.	Holding the nucleosome together : A quantitative description of the dna-histone interface in solution.	J. Chem. Theory Comput. 14(2)	1045-1058	(DOI:10.1021/acs.jctc.7b00936)
2018	D	ESQUE J., SANSOM MSP., BAADEN M., OGUEY C.	Analyzing protein topology based on Laguerre tessellation of a pore-traversing water network.	Scientific Reports 8	13540	(DOI:10.1038/s41598-018-31422-5)
2018	D	GRACIA-LAZARO C., HERNANDEZ L., BORGE-HOLTHOEFER J., MORENO Y.	The joint influence of competition and mutualism on the biodiversity of mutualistic ecosystems.	Scientific Reports 8	9253	(arXiv:1703.06122)(DOI:10.1038/s41598-018-27498-8)
2018	D	HERNANDEZ L., VIGNES A., SABA S.	Trust or robustness? An ecological approach to the study of auction and bilateral markets.	PLOS One	0196206	(DOI:10.1371/journal.pone.0196206)
2018	D	KAUFMAN M., DIEP H.T., KAUFMAN S.	Sociophysics of intractable conflicts: Three-group dynamics.	Physica A: Statistical Mechanics and its Applications 517	175-187	(DOI:10.1016/j.physa.2018.11.003)
2018	D	LUCCIOLI S., ANGULO-GARCIA D., COSSART R., MALVACHE A., MODOL L., SOUZA V.H., BONIFAZI P., TORCINI A.	Modeling driver cells in developing neuronal networks.	PLOS Computational Biology 14(11)	e1006551	(DOI:10.1371/journal.pcbi.1006551)
2018	D	POLITI A., ULLNER E., TORCINI A.	Collective irregular dynamics in balanced networks of leaky integrate-and-fire neurons.	European Physical Journal Special Topics 227(10-11)	1185	(DOI:10.1140/epjst/e2018-00079-7)
2018	D	TIAN C., CAO L., BI H., XU K., LIU Z.	Chimera states in neuronal networks with time delay and electromagnetic induction.	Nonlinear Dynamics 92	1-10	(DOI:10.1007/s11071-018-4285-z)
2018	D	ULLNER E., POLITI A., TORCINI A.	Ubiquity of collective irregular dynamics in balanced networks of spiking neurons.	Chaos 28	081106	(DOI:10.1063/1.5049902) (arXiv:1711.01096)
2017	A	ATANASOV V., DANDOLOFF R.	Quantum-elastic bump on a surface.	Eur.J. Phys. 38	015405	(DOI:10.1088/0143-0807/38/1/015405)
2017	A	BECKER J., KOHLER T., TIEGEL A.C., MANMANA S.R., WESSEL S., HONECKER A.	Finite-temperature dynamics and thermal intra-band magnon scattering in Haldane spin-one chains.	Phys. Rev. B 96 (6)	060403(R)	(DOI:10.1103/PhysRevB.96.060403) (arXiv:1703.04652)
2017	A	DUPREY Q., MATZKIN A.	Null weak values and the past of a quantum particle.	Physical Review A 95(3)	032110	(arXiv:1611.02780)(DOI:10.1103/PhysRevA.95.032110)
2017	A	EL HOG S., DIEP H.T.	Partial phase transition and quantum effects in helimagnetic films under an applied magnetic field.	Journal of Magnetism and Magnetic Materials		(Doi:10.1016/j.jmmm.2017.01.005)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2017	A	EL HOG S., DIEP H.T., PUSZKARSKI H.	Theory of magnons in spin systems with Dzyaloshinskii-Moriya interaction.	Journal of Physics: Condensed Matter 29 (30)	305001	(arXiv:1612.04147)
2017	A	FRATINI S., CIUCHI S., MAYOU D., TRAMBLY DE LAISSARDIERE G., TROISI A.	A map of high-mobility molecular semiconductors.	Nature Materials 16	998-1002	(DOI:10.1038/nmat4970)
2017	A	FUJI Y., LECHEMINANT P.	Non-Abelian SU(N-1)-singlet fractional quantum Hall states from coupled wires.	Phys. Rev. B 95	125130	(arXiv:1611.07968)(DOI:10.1103/PhysRevB.95.125130)
2017	A	LECHEMINANT P., TSVELIK A.M.	Lattice spin models for non-Abelian chiral spin liquids.	Phys. Rev. B 95	140406®	(arXiv:1608.05977)(DOI:10.1103/PhysRevB.95.140406)
2017	A	MATZKIN A.	The theory of the Double Solution: Dynamical issues in quantum systems in the semiclassical regime.	Ann. Fond. Louis Broglie 42	13	(arXiv:1611.02340)
2017	A	MISSAOUI A., JEMAA KHABTHANI J., JAIDANE N.E., MAYOU D., TRAMBLY DE LAISSARDIERE G.	Numerical analysis of electronic conductivity in graphene with resonant adsorbates: comparison of monolayer and Bernal bilayer.	Eur. Phys. J. B 90	75	(arXiv:1701.08216)(DOI:10.1140/epjb/e2017-70664-0)
2017	A	TRAMBLY DE LAISSARDIERE G., OGUEY C., MAYOU D.	Sub-diffusive electronic states in octagonal tiling.	Journal of Physics: Conf. Series 809	012020	(arXiv:1611.01057)
2017	A	WESSEL S., NORMAND B., MILA F., HONECKER A.	Efficient Quantum Monte Carlo simulations of highly frustrated magnets: the frustrated spin-1/2 ladder.	SciPost Phys. 3	005	(DOI:10.21468/SciPostPhys.3.1.005)
2017	A	WINTER S.M., RIEDL K., MAKSIMOV P.A., CHERNYSHEV A.L., HONECKER A., VALENTI R.	Breakdown of Magnons in a Strongly Spin-Orbital Coupled Magnet.	Nature Communications 8	1152	(arXiv:1702.08466)(DOI:10.1038/s41467-017-01177-0)
2017	A	ZENG Y., XU P., HE X. D., LIU Y. Y., LIU M., WANG J., PAPOULAR D. J., SHLYAPNIKOV G. V., AHAN M. S.	Entangling two atoms of different isotopes via Rydberg blockade.	Physical review Letters 119	16502	(arXiv:1702.00349)(DOI:10.1103/PhysRevLett.119.160502)
2017	B	AVAN J., CAUDRELIER V.	On the origin of dual Lax pairs and their r-matrix structure.	Journal of geometry and Physics 120	106-128	(arXiv:1612.04281)
2017	B	AVAN J., FRAPPAT L., RAGOUCY E.	Deformed Virasoro Algebras from Elliptic Quantum Algebras.	Communications in Mathematical Physics 354 (2)	753-773	(arXiv:1607.05050)
2017	B	AVAN J., FRAPPAT L., RAGOUCY E.	Dynamical centers for the elliptic quantum algebra $B_q(\mathfrak{gl}_2)_c$.	J. Phys. A: Math. Theor. 50 (39)	394002	(arXiv:1703.05223)(DOI:10.1088/1751-8121/aa85b2)
2017	B	CANTINI L.	Asymmetric Simple Exclusion Process with Open Boundaries and Koomwinder Polynomials.	Annales Henri Poincaré 18 (4)	1121-1151	(arXiv:1506.00284)(DOI:10.1007/s00023-016-0540-3)
2017	C	DE CONINCK J., DUNLOP F., HUILLET T.	Contact angles of a drop pinned on an incline.	Physical Review E 95	052805	(arXiv:1610.06725)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2017	C	DE CONINCK J., FERNANDEZ TOLEDANO J.C., DUNLOP F., HUILLET T.	Pinning of a drop by a junction on an incline.	Phys. Rev. E 96(4)	042804	(arXiv:1707.06061)(DOI:10.1103/PhysRevE.96.042804)
2017	C	GROSJEAN N., HUILLET T.	Wright-Fisher-like models with constant population size on average.	International Journal of Biomathematics 10(6)	1750078	(hal-01485341v1)(DOI:10.1142/S1793524517500784)
2017	C	GROSJEAN N., HUILLET T.	On the genealogy and coalescence times of Bienaymé-Galton-Watson branching processes.	Stochastics Models	1-24	(DOI:10.1080/15326349.2017.1375958)
2017	C	HUILLET T.	Random Evolutionary Dynamics Driven by Fitness and House-of-Cards Mutations: Sampling Formulae.	Journal of Statistical Physics 168(1)	15-42	(DOI:10.1007/s10955-017-1802-2)
2017	C	HUILLET T.	On Bagchi-Pal um models and related Polya-Friedman ones.	J. Stat. Mech. 2017 (9)	093211	(DOI:10.1088/1742-5468/aa8c2b)
2017	C	HUILLET T.	Stochastic species abundance models involving special copulas.	Physica A: Statistical Mechanics and its Applications 490	77-91	(DOI:10.1016/j.physa.2017.08.021)
2017	D	ANGULO-GARCIA D., LUCCIOLI S., OLM I S., TORCINI A.	Death and rebirth of neural activity in sparse inhibitory networks.	New Journal of Physics 19	053011	(DOI:10.1088/1367-2630/aa69ff)
2017	D	DIEP H.T., KAUFMAN M., KAUFMAN S.	Dynamics of two-group conflicts: A statistical physics model.	Physica A 469	183-199	(Doi:10.1016/j.physa.2016.10.072)
2017	D	KAUFMAN M., KAUFMAN S., DIEP H.T.	Scenarios of Social Conflict Dynamics on Duplex Networks.	Policy and Complex Systems 3(2)	3-13	(DOI:10.1063/PT.3.3986)
2017	D	OLMI S., ANGULO-GARCIA D., IMPARATO A., TORCINI A.	Exact firing time statistics of neurons driven by discrete inhibitory noise.	Nature Scientific Reports 7	1577	(arXiv:1703.04500)(DOI:10.1038/s41598-017-01658-8)
2016	A	AZARIA P., KONIK R.M., LECHEMINANT P., PALMAI T., TAKACS G., TSVELIK A.M.	Particle Formation and Ordering in Strongly Correlated Fermionic Systems: Solving a Model of Quantum Chromodynamics.	Phys. Rev. D 94	045003	(arXiv:1601.02979)(DOI:10.1103/PhysRevD.94.045003)
2016	A	BOIS V., FROMHOLZ P., LECHEMINANT P.	One-dimensional two-orbital SU(N) ultracold fermionic quantum gases at incommensurate filling: a low-energy approach,	Phys. Rev. B 93	134415	(arXiv:1602.00866)
2016	A	CAPPONI S., LECHEMINANT P., TOTSUKA K.	Phases of one-dimensional SU(NN) cold atomic Fermi gases—From molecular Luttinger liquids to topological phases.	Annals of Physics 367	50-95	(arXiv:1509.04597)
2016	A	DIEP H.T.	Theoretical methods for understanding advanced magnetic materials: The case of frustrated thin films .	Journal of Science: Advanced Materials and Devices 1(1)	31-44	(DOI:10.1016/j.jsamd.2016.04.009)
2016	A	EL HOG S., DIEP H.T.	Helimagnetic thin films: surface reconstruction, surface spin-waves and magnetization.	Journal of Magnetism and Magnetic Materials 400	276-281	(arXiv:1508.01367)
2016	A	EL HOG S., DIEP H.T.	Tricriticality of the Blume Emery Griffiths model in thin films of stacked triangular lattices.	Modern Physics Letters B 30(07)	1650071	(arXiv:1504.01372)
2016	A	HONECKER A., MILA F., NORMAND B.	Multi-triplet bound states and finite-temperature dynamics in highly frustrated quantum spin ladders.	Phys. Rev. B 94	094402	(arXiv:1605.09392)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2016	A	HONECKER A., WESSEL S., KERKDYK R., PRUSCHKE T., MILA F., NORMAND B.	Thermodynamic properties of highly frustrated quantum spin ladders: Influence of many-particle bound states	Phys. Rev. B 93	054408	(arXiv:1511.01501)
2016	A	KLYUSHINA E.S., TIEGEL A.C., FAUSEWEH B., ISLAM A.T.M.N., PARK J.T., KLEMKE B., HONECKER A., UHRIG G.S., MANMANAS.R., LAKE B.	Magnetic excitations in the S=12 antiferromagnetic-ferromagnetic chain compound BaCu ₂ V ₂ O ₈ at zero and finite temperature,	Phys. Rev. B93	241109(R)	(arXiv:1602.06184) (DOI:10.1103/PhysRevB.93.241109)
2016	A	PAPOULAR D., PITAEVSKII L.P., STRINGARI S.	Quantized conductance through the quantum evaporation of bosonic atoms.	Phys. Rev. A 94	023622	(arXiv:1510.02618)
2016	A	PUSZKARSKI H., TOMCZAK P., DIEP H.T.	Surface anisotropy energy in terms of magnetocrystalline anisotropy fields in ferromagnetic semiconductor (Ga,Mn) As thin films.	Phys. Rev. B 94	195303	(DOI:10.1103/PhysRevB.94.195303)
2016	A	SANDEAU N., AKHOUAYRI H., MATZKIN A., DURT T.	Experimental violation of Tsirelson's bound by Maxwell fields.	Phys. Rev. A 93 (5)	053829	(Doi:10.1103/PhysRevA.93.053829)
2016	A	TIEGEL A.C., HONECKER A., PRUSCHKE T., PONOMARYOV A., ZVYAGIN S.A., FEYERHERM R., MANMANA S.R.	Dynamical properties of the sine-Gordon quantum spin magnet Cu-PM at zero and finite temperature.	Phys. Rev. B 93	104411	(arXiv:1511.07880)
2016	A	TIEGEL A.C., MANMANA S.R., PRUSCHKE T., HONECKER A.	Erratum: Matrix product state formulation of frequency-space dynamics at finite temperatures.	Phys. Rev. B 94(17)	179908	(DOI:10.1103/PhysRevB.94.179908)
2016	A	TIEGEL A.C., VENESS T., DARGEL P.E., HONECKER A., PRUSCHKE T., McCULLOCH I.P., ESSLER F.H.L.	Optical conductivity of the Hubbard chain away from half filling.	Phys. Rev. B 93	125108	(arXiv:1601.00648)
2016	A	TRAMBLY DE LAISSARDIERE G., NAMARVAR O.F., MAYOU D., MAGAUD L.	Electronic properties of asymmetrically doped twisted graphene bilayers.	Phys. Rev. B93	235135	(arXiv:1603.03895) (DOI:10.1103/PhysRevB.93.235135)
2016	A	YAHYAOU S., DIEP H.T.	Magnetic properties of (La _{0.56} Ce _{0.14})Sr _{0.30} MnO ₃ perovskite.	Physics Letters A 380(39)	3212-3216	(arXiv:1607.00221)
2016	A	YAHYAOU S., KALLEL S., DIEP H.T.	Magnetic properties of perovskites La _{0.7} Sr _{0.3} View the MathML sourceMn _{0.73} + View the MathML sourceMn _{0.3} -x ₄ +TixO ₃ : Monte Carlo simulation versus experiments.	J. Mag. Magn. Materials 416	441-448	(arXiv:1605.05107) (DOI:10.1016/j.jmmm.2016.05.037)
2016	B	AVAN J., CAUDRELIER V., DOIKOU A., KUNDU A.	Lagrangian and Hamiltonian structures in an integrable hierarchy and space-time duality.	Nucl. Phys . B 902	415-439	(arXiv:1510.01173)
2016	B	BELLIARD S., PIMENTA R.A.	Slavnov and Gaudin-Korepin formulas for models without U (1) symmetry: The XXX chain on the segment.	Journal of Physics A Mathematical and Theoretical 49(17)	17LT01	(DOI:10.1088/1751-8113/49/17/17LT01) (arXiv:1507.03242)
2016	B	CANTINI L., GARBALI A., De GIER J., WHEELER M.	Koornwinder polynomials and the stationary multi-species asymmetric exclusion process with open boundaries.	J. Phys. A: Math. Theor. 49(44)	444002	(arXiv:1607.00039)
2016	B	TRUONG T.T.	Quartic Anharmonic Oscillator Integral Properties Via The 2D-Quantum Free Fall Problem.	Far East Journal of Applied Mathematics 94(6)	455-490	(DOI:10.17654/AM094060455)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2016	C	FAJFROVA L., GOBRON T., SAADA E.	Invariant measures of mass migration processes.	Electronic Journal of Probability 21	Paper n°60	(DOI:10.1214/16-EJP4399)
2016	C	GROSJEAN N., HUILLET T.	Deterministic versus stochastic aspects of superexponential population growth models.	Physica A 455	23-27	(hal-01215213)(DOI:10.1016/j.physa.2016.02.063)
2016	C	GROSJEAN N., HUILLET T.	Additional aspects of the generalized linear-fractional branching process.	Annals of the Institute of Statistical Mathematics	1-23	(hal-01215208)(DOI:10.1007/s10463-016-0573-x)
2016	C	GROSJEAN N., HUILLET T.	Some combinatorial aspects of discrete non-linear population dynamics.	Chaos, Solitons and Fractals 93	71-79	(DOI:10.1016/j.chaos.2016.10.004)
2016	C	GROSJEAN N., HUILLET T.	On a coalescence process and its branching genealogy.	Journal of Applied Probability 53(4)	1156-1165	(hal-01279278)(DOI:10.1017/jpr.2016.71)
2016	C	GROSJEAN N., HUILLET T.	On simple age-structured population models.	Applied Mathematical Modelling		(DOI:10.1016/j.apm.2016.08.016)
2016	C	GROSJEAN N., HUILLET T., ROLLET G.	On discrete evolutionary dynamics driven by quadratic interactions.	Theory in Biosciences 135(4)	187-200	(arXiv:1607.01885)(DOI:10.1007/s12064-016-0232-z)
2016	C	HUILLET T.	On Mittag-Leffler distributions and related stochastic processes.	Journal of Comput. and Appl. Math. 296	181-211	(DOI:10.1016/j.cam.2015.09.031)
2016	C	HUILLET T.	Random walk Green kernels in the neutral Moran model conditioned on survivors at a random time to origin.	Mathematical Population Studies 23(3)	164-200	(DOI:10.1080/08898480.2015.1087775)
2016	C	HUILLET T., MARTINEZ S., MOEHLE M.	On polymorphism for discrete evolutionary dynamics driven either by selection or segregation distortion.	Computational and Applied Mathematics		(DOI:10.1007/s40314-016-0403-z) (hal-01396515)
2016	C	KOUKIOU F.	A Generalized Variational Principle for Gaussian Random Fields.	Journal of Physics: Conference Series 738(1)	012007	(DOI:10.1088/1742-6596/738/1/012007)
2016	C	SWIECICKI I., GOBRON I., ULLMO D.	"Phase diagram" of a mean field game.	Physica A: Statistical Mechanics and its Applications 442	467-485	(doi:10.1016/j.physa.2015.09.018)
2016	C	SWIECICKI I., GOBRON T., ULLMO D.	Schrödinger Approach to Mean Field Games.	Phys. Rev. Lett. 116	128701	(arXiv:1511.00602)
2016	D	BEN IMEDDOURENE A., XU X., ZARGARIAN L., OGUEY C., FOLOPPE N., MAUFFRET O., HARTMANN B.	The intrinsic mechanics of B-DNA in solution characterized by NMR.	Nucleic Acids Research 44(7).	3432-3447	(DOI:10.1093/nar/gkw084)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2016	D	PIQUET F., HOULDALI H., DISCALA F., BRETON M.F., BEHREND S.J., PELTA J., OUKHALED A.	High Temperature Extends the Range of Size Discrimination of Nonionic Polymers by a Biological Nanopore.	Scientific Reports 6	38675	(Doi:10.1038/srep38675)
2015	A	ATANASOV V., DANDOLOFF R.	The curvature of the rotating disk and its quantum manifestation.	Phys. Scr. 90	065001	(arXiv:1409.5004)
2015	A	BAILLY-REYRE A., DIEP H.T., KAUFMAN M.	Phase Transition and surface sublimation of a mobile Potts model.	Phys. Rev. E 92	042160	(arXiv:1510.04460)
2015	A	BOIS V., CAPPONI S., LECHEMINANT P., MOLINER M.	Competing superconducting instabilities in the one-dimensional p-band degenerate cold fermionic system.	Phys. Rev. B 92	075140	(arXiv:1505.06715)
2015	A	BOIS V., CAPPONI S., LECHEMINANT P., MOLINER M., TOTSUKA K.	Phase diagrams of one-dimensional half-filled two-orbital SU(N) cold fermions systems.	Phys. Rev. B 91	075121	(arXiv:1410.2974)
2015	A	CHERKEZ V., TRAMBLY DE LAISSARDIERE G., MALLET P., VEUILLON J.Y.	Van Hove singularities in doped twisted graphene bilayers studied by scanning tunneling spectroscopy.	Phys. Rev. B 91	155428	(DOI: 10.1103/PhysRevB.91.155428)
2015	A	DANDOLOFF R.	New Topological Configurations in the Continuous Heisenberg Spin Chain: Lower Bound for the Energy.	Advances in Condensed Matter Physics 2015	ID 954524	(DOI:10.1155/2015/954524)
2015	A	DIEP H.T.	Quantum theory of helimagnetic thin films.	Physical Review B 91 (1)	014436	
2015	A	FELOUZIS V., HERMAND P., TRAMBLY DE LAISSARDIERE G., COMBADIÈRE C., DETERRE P.	Comprehensive analysis of chemokine-induced cAMP-inhibitory responses using a real-time luminescent biosensor.	Cellular Signalling 28	120-129	(DOI:10.1016/j.cellsig.2015.10.011)
2015	A	LECHEMINANT P.	Massless renormalization group flow in SU(N) _k perturbed conformal field theory.	Nuclear Physics B 901	510-525	(arXiv:1509.01680) (DOI:10.1016/j.nuclphysb.2015.11.004)
2015	A	LECHEMINANT P., TSVELIK A.M.	Two-leg SU(2n) spin ladder: A low-energy effective field theory approach.	Physical Review B 91 (17)	174407	(arXiv:1502.04515)
2015	A	MATZKIN A.	Weak measurements of trajectories in quantum systems: classical, Bohmian and sum over paths.	J. Phys. A: Math. Theor. 48	305301	(arXiv:1411.3855)
2015	A	OZEROV M., MAKSYMENKO M., WOSNITZA J., HONECKER A., LANDEE C.P., TURNBULL M.M., FURUYA S.C., GIAMARCHI T., ZVYAGIN S.A.	Electron spin resonance modes in a strong-leg ladder in the Tomonaga-Luttinger liquid phase.	Phys. Rev. B 92	241113	(arXiv:1509.02056)
2015	A	SPONAR S., DENKMAYR T., GEPPERT H., LEMMEL H., MATZKIN A., TOLLAKSEN J., HASEGAWA Y.	Weak values obtained in matter-wave interferometry.	Phys. Rev. A 92(6)	062121	(10.1103/PhysRevA.92.062121)
2015	B	AVAN J., BELLARD S., GROSJEAN N., PIMENTA R.A.	Modified algebraic Bethe ansatz for XXZ chain on the segment - III - Proof.	Nuclear Physics B 899	229-246	(arXiv:1506.02147) (DOI:10.1016/j.nuclphysb.2015.08.006)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2015	B	AVAN J., DOIKOU A., KARAISKOS N.	Scattering matrices in the $sl(3)$ twisted Yangian.	J. Stat. Mech.	P02007	(DOI:10.1088/1742-5468/2015/02/P02007) (arXiv:1410.5991)
2015	B	AVAN J., DOIKOU A., KARAISKOS N.	The $sl(N)$ Twisted Yangian: Bulk Boundary Scattering and Defects.	J. Stat. Mech.	P05024	(arXiv:1412.6480) (DOI: 10.1088/1742-5468/2015/05/P05024)
2015	B	AVAN J., RAGOUCY E., ROUBTSOV V.	Quantization and Dynamization of Trace Poisson Brackets.	Journal Communications in Mathematical Physics 341(1)	263-287	(arXiv:1401.7629)(DOI:10.1007/s00220-015-2538-y)
2015	B	BELLIARD S.	Modified algebraic Bethe ansatz for XXZ chain on the segment - I - triangular cases.	Journal-ref: Nuclear Phys. B892	1-20	(arXiv:1408.4840)
2015	B	BELLIARD S., PIMENTA R.A.	Modified algebraic Bethe ansatz for XXZ chain on the segment - II - general cases.	Nuclear Physics B 894	527-552	(arXiv:1412.7511)
2015	B	BELLIARD S., PIMENTA R.A.	Slavnov and Gaudin formulas for models without $U(1)$ symmetry: the twisted XXX chain.	Symmetry Integrability and Geometry Methods and Applications (SIGMA) 11	099	(DOI: 10.3842/SIGMA.2015.099) (arXiv:1506.06550)
2015	B	CANTINI L., De GIER J., WHEELER M.	Matrix product formula for Macdonald polynomials.	J. Phys. A: Math. Theor. 48	384001	(arXiv:1505.00287)
2015	B	TRUONG T.T., NGUYEN M.K.	New properties of the V-line Radon transform and their imaging applications.	J. Phys. A: Math. Theor. 48	405204	(DOI:10.1088/1751-8113/48/40/405204)
2015	C	AVAN J., GROSJEAN N., HUILLET Th.	On extreme events for non-spatial and spatial branching Brownian motions.	Physica D, Nonlinear phenomena. 298	13-20	(arXiv:1402.5389)
2015	C	AVAN J., GROSJEAN N., HUILLET Th.	Did the ever dead outnumber the living and when? A birth-and-death approach.	Physica A: Stat. Mech. and its Appl.	Online First	(DOI: 10.1016/j.physa.2014.10.050) (hal-01053172)
2015	C	COLLET P., DUNLOP F., HUILLET T.	Wetting Transitions for a Random Line in Long-Range Potential.	J. Stat. Phys. 160(6)	1545-1622	(DOI:10.1007/s10955-015-1296-8) (arXiv:1411.5130)
2015	C	De CONINCK J., DUNLOP F., HUILLET Th.	Wetting in 1+1 dimensions with two-scale roughness.	Physica A 438	398-415	(DOI:10.1016/j.physa.2015.06.030) (hal-01093709)
2015	C	HUILLET T., SANTHANAM M.S.	Preface to the special issue on Extreme Events and its Applications.	Chaos Solitons and Fractals 74	1-2	(DOI:10.1016/j.chaos.2015.03.001)
2015	D	BEN IMEDDOURENE A., ELBAHNSI A., GUEROULT M., OGUEY C., FOLOPPE N., HARTMANN B.	Simulations Meet Experiment to Reveal New Insights into DNA Intrinsic Mechanics.	PLoS Computational Biology 11(12)	e1004631	(DOI:10.1371/journal.pcbi.1004631)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2015	D	BURGOS E., HERNANDEZ L., CEVA H., PERAZZO R.P.J.	Entropic determination of the phase transition in a coevolving opinion-formation model.	Physical Review E 91	032808	(DOI:10.1103/PhysRevE.91.032808)
2015	D	ELBAHNSI A., MAUFFRET O., PERAHIA D., HARTMANN B., OGUEY C.	New insights on nucleic acids - protein interfaces revealed by VLDM, a geometrical approach.	Journal of Biomolecular Structure & Dynamics 33(1)	14-15	(DOI:10.1080/07391102.2015.1032565)
2014	A	BOCCHETTI V., DIEP H.T., ENRIQUEZ H., OUGHADDOU H., KARA A.	Thermal Stability of Standalone Silicene Sheet.	J. Phys.: Conference Series 491	012008	(hal-00862045) (arXiv:1309.3828)
2014	A	DANDOLOFF R., JENSEN B., SAXENA A.	Generalized anti-centrifugal potential.	Phys.Lett. A 378	510	
2014	A	DENKMAYR T., GEPPERT H., SPONAR S., LEMMEL H., MATZKIN A., TOLLAKESEN J., HASEGAWA Y.	Observation of a quantum Cheshire Cat in a matter wave interferometer experiment.	Nature Communications 5	4492	(DOI:10.1038/ncomms5492)
2014	A	DIEP H.T., BOCCHETTI V., HOANG D.T., NGO V.T.	Theory and Simulation of Magnetic Materials: Physics at Phase Frontiers.	J. Phys.: Conference Series 537	012001	(arXiv:1309.4754)
2014	A	HOANG D.T., DIEP H.T.	Phase Transition in Dimer Liquids.	J. Phys.: Condens. Matter 26	035103	
2014	A	JENSEN B., DANDOLOFF R., SAXENA A.	Quantum particle constrained to a surface in quantum hydrodynamics.	Phys. Scr. 89	105202	
2014	A	JOLICOEUR T., MIZUSAKI T., LECHEMINANT P.	Absence of a gap in the Gaffnian state.	Phys. Rev. B 90	075116	
2014	A	NGO V.T., HOANG D.T., DIEP H.T., CAMPBELL I.A.	Effect of Disorder in the Frustrated Ising FCC Antiferromagnet: Phase Diagram and Stretched Exponential Relaxation.	Modern Phys. Letters B 28	1450067	(hal-00860682) (arXiv:1309.2594)
2014	A	TRAMBLY DE LAISSARDIERE G., MAYOU D.	Anomalous electronic transport in Quasicrystals and related Complex Metallic Alloys.	C. R. Physique 15	70-81	(arXiv:1309.6991)
2014	A	TRAMBLY DE LAISSARDIERE G., SZALLAS A., MAYOU D.	Electronic Structure and Transport in Approximants of the Penrose Tiling.	Acta Physica Polonica A 126 (2)	617	(hal-01056268) (DOI:10.12693/APhysPolA.126.617)
2014	A	WOLF B., HONECKER A., HOFSTETTER W., TUTSCH U., LANG M.	Cooling through quantum criticality and many-body effects in condensed matter and cold gases.	International Journal of Modern Physics B 28(26)	1430017	(DOI: 10.1142/S0217979214300175)
2014	B	AVAN J., FONSECA T., FRAPPAT L., KULISH P., RAGOUCY E., ROLLET G.	Temperley-Lieb R-Matrices from Generalized Hadamard Matrices.	Theor. Math. Phys. 178	223	(arXiv:1306.2927)
2014	B	AVAN J., KULISH P., ROLLET G.	Reflection Matrices from Hadamard Type Temperley-Lieb R-Matrices.	Theor.Math.Phys. 179	387	(arXiv:1307.7608)
2014	B	CANTINI L., SPORTIELLO A.	A one-parameter refinement of the Razumov-Stroganov correspondence.	Journal of Combinatorial Theory, Series A 127	400-440	(arXiv: 1202.5253)
2014	B	GROSJEAN N., MAILLET J.M., NICCOLI G.	On the Form Factors of Local Operators in the Bazhanov–Stroganov and Chiral Potts Models.	Annales Henri Poincaré	Online First	(DOI:10.1007/s00023-014-0358-9)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2014	C	BENSALLAH M., DJEDDOU M., DROUCHE K.	Security enhancement of the authenticated RFID security mechanism based on chaotic maps.	Security and Communication Networks		(DOI: 10.1002/sec.946)
2014	C	HUILLET T.	Pareto genealogies arising from a Poisson branching evolution model with selection.	Journal of Mathematical Biology 68(3)	727-61	(hal-00782525) (DOI:10.1007/s00285-013-0649-7)
2014	C	HUILLET T., MARTINEZ S.	On Mobius Duality and Coarse-Graining.	Journal of Theoretical Probability	1-37	(hal-01023244) (DOI:10.1007/s10959-014-0569-5)
2014	C	HUILLET T., MOEHLE M.	Asymptotics of symmetric compound Poisson population models.	Combinatorics, Probability and Computing (Special issue dedicated to the memory of Philippe Flajolet) 23(5)	1-38	(hal-00730734) (DOI:10.1017/S0963548314000431)
2014	D	BORGHESI C., MOUKHTAR J., LABOUSSE M., EDDI A., FORT E., COUDER Y.	The interaction of two walkers: wave-mediated energy and force.	Phys. Rev. E90 (Editor's Suggestion")	063017	(DOI:10.1103/PhysRevE.90.063017)
2014	D	BOUCHAUD J.-P., BORGHESI C., JENSEN P.	On the emergence of an "intention field" for socially cohesive agents.	J. Stat. Mech.	P03010	(arXiv:1311.0810)
2014	D	ESSAFI K., KOWNACKI J.P., MOUHANNA D.	First order phase transitions in polymerized phantom membranes.	Physical Review E 89	042101	
2014	D	FOSTER D.P., PIGUET F.	Collaborative effects in polymer translocation and the appearance of fictitious free-energy barriers.	Physical review E 89	030601	
2014	D	JOLLIVET A.	Inverse scattering at high energies for the multidimensional Newton equation in a long range potential.	Asymptotic Analysis 90(1&2)	105-132	(arXiv:1306.3638)
2014	D	PERAZZO R. P.J., HERNANDEZ L., BURGOS E., CEVA H., HAMELIN I. A.	Study of the influence of the phylogenetic distance on the interaction network of mutualistic ecosystems.	Physica A 394	124-135	
2014	D	TRUONG T.T.	On geometric aspects of circular arcs Radon transforms for Compton scatter tomography.	Eurasian Journal of Mathematical and Computer Applications 2 (1)	40-69	
2013	A	BOCCHETTI V., DIEP H.T.	Melting of rare-gas crystals: Monte Carlo simulation versus experiments.	J. Chem. Phys. 138	104122	(arXiv:1210.1309)
2013	A	BOCCHETTI V., DIEP H.T.	Monte Carlo Simulation of Melting and Lattice Relaxation of the (111) Surface of Silver.	Surface Science 614	46	(DOI:10.1016/j.susc.2013.04.003) (hal-00776022)
2013	A	BORGHESI C., HERNANDEZ L., LOUF R., CAPARROS F.	Universal size effects for populations in group-outcome decision-making problems.	Phys. Rev. E 88	062813	(arXiv:1305.5476)
2013	A	CAPPONI S., LECHEMINANT P., MOLINER M.	Quantum phase transitions in multileg spin ladders with ring exchange.	Physical Review B88	075132	(arXiv:1304.6877)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2013	A	HOANG D.T., KASPERSKI M., PUSZARSKI H., DIEP H.T.	Re-Orientation Transition in Molecular Thin Films: Potts Model with Dipolar Interaction.	Cond. Matter 25	056006	(arXiv:1209.0114) (hal-00727105)
2013	A	HOANG D.T., KASPERSKI M., PUSZKARSKI H., DIEP H.T.	Re-orientation transition in molecular thin films: Potts model with dipolar interaction.	Journal of Physics Condensed Matter 25(5)	056006	(arXiv:1209.0114) (DOI:10.1088/0953-8984/25/5/056006)
2013	A	KASPERSKI M., PUSZKARSKI H., HOANG D.T., DIEP H.T.	Magnetic Properties of Two-dimensional Nanodots: Ground State and Phase Transition.	AIP Advances 3	122121	(DOI:10.1063/1.4858416) (hal-00867361)
2013	A	MATZKIN A., PAN A.K.	Three-box paradox and "Cheshire cat grin": the case of spin-1 atoms.	J. Phys. A: Math. Theor. 46(31)	315307	(DOI:10.1088/1751-8113/46/31/315307)
2013	A	MOLINER M., SCHMITTECKERT P.	Adiabatic Tracking of a State: a New Route to Nonequilibrium Physics.	Phys. Rev. Lett. 111	120602 (Selected as an Editors' Suggestion)	(arXiv:1307.2762)
2013	A	NONNE H., MOLINER M., CAPPONI S., LECHEMINANT P., TOTSUKA K.	Symmetry-protected topological phases of alkaline-earth cold fermionic atoms in one dimension.	Europhysics Letters 102(3)	37008	(arXiv:1210.2072)
2013	A	RANCON A., KODIO O., DUPUIS N., LECHEMINANT P.	Thermodynamics in the vicinity of a relativistic quantum critical point in 2 +1 dimensions.	Phys. Rev. E 88	012113	(arXiv:1303.6559)
2013	A	SOULE P., JOLICOEUR T., LECHEMINANT P.	Many-body study of a quantum point contact in the fractional quantum Hall regime at $\nu=5/2$.	Phys. Rev. B 88	235107	(arXiv:1307.3362)
2013	A	TRAMBLY DE LAISSARDIERE G., MAYOU D.	Conductivity of Graphene with Resonant and Nonresonant Adsorbates.	Phys. Rev. Lett. 111	146601	(arXiv:1212.3997)
2013	C	COLLET P., De CONINCK J., DROUICHE K., DUNLOP F.	From substrate disorder to contact angle hysteresis, and back.	Colloid & Polymer Science 291	291-298	(DOI 10.1007/s00396-012-2839-z)
2013	C	De CONINCK J., DUNLOP F., HUILLET Th.	Is superhydrophobicity robust with respect to disorder?	European Physical Journal E 36	104	DOI: 10.1140/epje/i2013-13104-2 (arXiv:1308.4001)
2013	C	DJEDDOU M., ZEHER H., NEKACTALI Y., DROUICHE K.	TOA estimation technique for IR-UWB based on homogeneity test.	ETRI Journal 35 (5)	757-766	
2013	C	HUILLET T.	Fluctuations Analysis of finite discrete Birth and Death Chains with Emphasis on Moran Models with Mutations.	Biomathematics, ISRN, Volume 2013	Article ID 939308	(hal-00843285)
2013	C	HUILLET T., MARTINEZ S.	Occupancy distributions arising in sampling from Gibbs-Poisson abundance models.	Journal of Statistical Physics 153 (5)	763-800	(hal-00797149 - v3)(DOI:10.1007/s10955-013-0865-y)
2013	C	HUILLET Th., MOEHLE M.	On the extended Moran model and its relation to coalescents with multiple collisions.	Theoretical Population Biology, 87. "Special Issue on Coalescent Theory", J. Wakeley (dir.), Princeton University	5-14	(hal-00589326) (DOI: 10.1016/j.tpb.2011.09.004)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2013	D	BILLAUD B., TRUONG T.T.	Lamb shift of non-degenerate energy level systems placed between two infinite parallel conducting plates.	J. Phys. A: Math. Theor. 46	025306	(DOI 10.1088/1751-8113/46/2/025306)
2013	D	CARVALHO-SANTOS V.L., DANDOLOFF R.	Topological Spin Excitations Induced by an External Magnetic Field Coupled to a Surface with Rotational Symmetry.	Brazilian Journal of Physics 43(3)	130-136	(DOI:10.1007/s13538-013-0126-1)
2013	D	ESQUE J., LEONARD S., DE BREVERN A.G., OGUEY C.	VLDP web server : a powerful geometric tool for analysing protein structures in their environment.	Nucl. Acid Res. 41(W1)	W373-W378	
2013	D	JOLLIVET A.	On inverse scattering at fixed energy for the multidimensional Newton equation in a non-compactly supported field.	Journal of Inverse and Ill-posed Problems 21(6)	713-734	(hal-00745126)
2013	D	NATH S., FOSTER D.P., GIRI D., KUMAR S.	Single polymer gating of channels under a solvent gradient.	Phys. Rev. E 88	054601	(DOI:10.1103/PhysRevE.88.054601)
2013	D	PIGUET F., FOSTER D.	Translocation of short and long polymers through an interacting pore.	J. Chem. Phys. 138	084902	(arXiv:1302.2833)
2013	D	SATOMI R., GRASSIA P., OGUEY C.	Modelling relaxation following T1 transformations of foams incorporating surfactant mass transfer by the Marangoni effect.	Col. Surf. A : Physicochem. Eng. Aspects 438	77-84	
2013	D	TRUONG T.T.	Inversion of some spherical cap Radon transforms.	Eurasian Journal of Mathematical and Computer Applications 1 (1)	78-102	
2012	A	BORGHESI C., CHICHE J., NADAL J.P.	Between Order and Disorder: a "Weak law" on Recent Electoral Behavior among Urban Voters?	PLoS ONE 7 (7)	e39916	(doi:10.1371/journal.pone.0039916)
2012	A	BORGHESI C., RAYNAL J.C., BOUCHAUD J.P.	Election Turnout Statistics in Many Countries: Similarities, Differences, and a Diffusive Field Model for Decision-Making.	PLoS ONE 7(5)	e36289	(doi:10.1371/journal.pone.0036289)
2012	A	BRIHUEGA I., MALLET P., GONZALEZ-HERRERO H., TRAMBLY DE LAISSARDIERE G., UGEDA M.M., MAGAUD L., GOMEZ-RODRIGUEZ J.M., YNDURAIN F., VEUILLIN J.Y.	Unraveling the Intrinsic and Robust Nature of van Hove Singularities in Twisted Bilayer Graphene by Scanning Tunneling Microscopy and Theoretical Analysis.	Phys. Rev. Lett. 109	196802	(hal-00730469) (arXiv: 1209.0991)
2012	A	DIEP H.T., MAGNIN Y., HOANG D.T.	Spin Resistivity in Magnetic Materials.	Acta Physica Polonica A 121	985	
2012	A	ESSAFI K., KOWNACKI J.P., MOUHANNA D.	Nonperturbative renormalization group approach to Lifshitz critical behaviour.	Europhysics Letters 98	51002	(arXiv:1202.5946)
2012	A	HOANG D.T., DIEP H.T.	Hexagonal-Close-Packed Lattice: Ground State and Phase Transition.	Phys. Rev. E 85	041107	(hal-00654998)
2012	A	HOANG D.T., DIEP H.T.	Effect of Dipolar Interaction in Molecular Crystals.	J. Phys.: Condensed Matter. 24	415402	(hal-00654165)
2012	A	HOME D., MAJUMDAR A.S., MATZKIN A.	Effects of a transient barrier on wavepacket traversal.	J. Phys. A: Math. Theor. 45	295301	

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2012	A	LECHEMINANT P., NONNE H.	Exotic quantum criticality in one-dimensional coupled dipolar bosons tubes. Papier sélectionné "Editor's suggestion".	Phys. Rev. B. 85	195121	(arXiv: 1202.6541)
2012	A	MAGNIN Y., DIER H.T.	Monte Carlo Study of Magnetic Resistivity in Semiconducting MnTe.	Phys. Rev. B 85	184413	(hal-00638620)
2012	A	MATZKIN A.	Weak Measurements in Non-Hermitian Systems.	J. Phys. A 45	444023	(arXiv:1204.3296)
2012	A	MATZKIN A.	Observing Trajectories with Weak Measurements in Quantum Systems in the Semiclassical Regime.	Phys. Rev. Lett. 109	150407	(arXiv:1202.5326)
2012	A	PAN A.K., MATZKIN A.	Weak measurements as an instance of non-ideal measurements.	Las. Phys. 22	1553	
2012	A	PAN A.K., MATZKIN A.	Weak and semiweak values in non-ideal measurements: an exact treatment beyond the asymptotic regime.	Phys. Rev. A 85	022122	(arXiv:1109.6824)
2012	A	TOTSUKA K., LECHEMINANT P., CAPPONI S.	Semiclassical approach to competing orders in two-leg spin ladder with ring-exchange.	Phys. Rev. B 86	014435	(arXiv:1204.0333)
2012	A	TRAMBLY DE LAISSARDIERE G., MAYOU D., MAGAUD L.	Numerical studies of confined states in rotated bilayers of graphene.	Phys. Rev. B 86	125413	(hal-00679180) (arXiv:1203.3144)
2012	B	AVAN J., BILLAUD B., ROLLET G.	Classification of Non-Affine Non-Hecke Dynamical R-Matrices.	SIGMA 8	064	(arXiv: 1204.2746)
2012	B	AVAN J., DOIKOU A.	Liouville integrable defects: the non-linear Schrodinger paradigm.	Journal of High Energy Physics 01	040	(arXiv:1110.4728)
2012	B	AVAN J., DOIKOU A.	The Sine Gordon Model with integrable defects revisited.	JHEP 11	008	(arXiv:1205.1661)
2012	B	AVAN J., RAGOUCY E.	A new dynamical reflection algebra and related quantum integrable systems.	Lett. Math. Phys. 101	85-101	(arXiv:1106.3264)
2012	B	AVAN J., RAGOUCY E.	Rational Calogero-Moser model: Explicit forms and r-matrix structure of the second Poisson structure .	SIGMA (8)	079	(arXiv:1207.5368)
2012	B	BIANE P., CANTINI L., SPORTIELLO A.	Doubly-refined enumeration of alternating sign matrices and determinants of 2-staircase Schur functions.	Séminaire Lotharingien de Combinatoire B65f	25pp.	
2012	B	CANTINI L.	Finite size emptiness formation probability of the XXZ spin chain at $-1/2$.	J. Phys. A: Math. Theor. 45	135207	(DOI:10.1088/1751-8113/45/13/135207)
2012	C	HUILLET T.	A branching diffusion model of selection: from the neutral Wright-Fisher case to the one including mutations.	International Mathematical Forum 7 (1)	1-36	(arXiv:1107.2504)
2012	C	HUILLET T.	Diffusion versus jump processes arising as scaling limits in population genetics.	Journal of Statistics: Advances in Theory and Applications 7 (2)	85-154	(hal-00714371)
2012	C	HUILLET T., MOEHLE M.	Correction on "Population genetics models with skewed fertilities: a forward and backward analysis".	Stochastic Models 28 (3)	527-532	(hal-00646215)
2012	D	ATANASOV V., DANDOLOFF R., SAXENA A.	Torus in a magnetic field: curvature-induced surface states.	J. Phys. A: Mat.Theor. 45	105307	
2012	D	CARVALHO-SANTOS V.L., DANDOLOFF R.	Coupling between magnetic field and curvature in Heisenberg spins on surfaces with rotational symmetry.	Phys. Lett. A 376(46)	3551-3554	

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2012	D	FOSTER D.P., PINETTES C.	Surface critical behaviour of the vertex-interacting self-avoiding walk on the square lattice.	J. Phys. A 45	505003	(arXiv:1211.0295)
2012	D	GRASSIA P., OGUEY C., SATOMI R.	Relaxation of the topological T1 process in a two-dimensional foam.	Eur. Phys. Journal E 35	1-12	
2010	A	LOMBARDI M., MATZKIN A.	Dynamical entanglement as a signature of chaos.	Las. Phys. 20	1215	
2010	A	MAGNIN Y., AKABLI K., DIEP H.T., HARADA I.	Monte Carlo Study of the Spin Transport in Magnetic Materials.	Computational Materials Science 49	s204-s209	(hal-00426291)
2010	A	NGO V.T., TIEN HOANG D., DIEP H.T.	First-Order Transition in XY Fully Frustrated Simple Cubic Lattice.	Phys. Rev. E 82	041123	(hal-00480790)
2010	A	NONNE H., BOULAT E, CAPPONI S., LECHEMINANT P.	Competing orders in the generalized Hund chain model at half-filling.	Physical Review B 82	155134	(arXiv:1006.3884)
2010	A	NONNE H., LECHEMINANT P., CAPPONI S., ROUX G., BOULAT E.	Haldane charge conjecture in one-dimensional multicomponent fermionic cold atoms.	Physical Review B81, Rapid Communications	020408®	(arXiv:0906.3528v1)
2010	A	OKO M., OKADA K., HARADA I., AKABLI K., DIEP H.T.	Theoretical Study of XMCD Spectra for Field-induced Valance Transition in Eu Compounds.	J. Phys. Soc. Jpn 79	024713	
2010	A	TRAMBLY DE LAISSARDIERE G., MAYOU D., MAGAUD L.	Localization of Dirac Electrons in Rotated Graphene Bilayers.	Nano Lett. 10(3)	804-808	(hal-00381650)
2010	B	ANICETO I., AVAN J., JEVICKI A.	Poisson structures of Calogero moser and Ruijsenaars-Schneider models.	Journal of Physics A. 43	185201	(arXiv:0912.3468)
2010	B	AVAN J., DOIKOU A., SFETSOS K.	Systematic classical continuum limits of integrable spin chains and emerging novel dualities.	Nucl. Phys. B840	469-490	(arXiv:1005.4605)
2010	B	FILALI G., KITANINE N.	The partition function of the trigonometric SOS model with a reflecting end.	J. Stat. Mech.	L06001	
2010	C	ALEXANDER K.S., DUNLOP F., MIRACLE-SOLE S.	Layering in the Ising model.	J. Stat. Phys. 141	217-241	(arXiv:0911.2105v1 [cond-mat.stat-mech])
2010	C	DUNLOP F.	Space-time correlations of a Gaussian interface.	Markov Processes Relat. Fields 16	205-222	(arXiv:1002.1604v1 [math.PR])
2010	C	GOBRON Th., SAADA E.	Couplings, attractiveness and hydrodynamics for conservative particle systems.	Annales de l'Institut Henri Poincaré (B), Probabilités et Statistiques 46 (4)	11321177	(arXiv:0903.0316) (hal-00364941)
2010	C	HUILLET Th.	Random walk with long-range interaction with a barrier and its dual : Exact results.	Journal of Computational and Applied Mathematics 233	2449-2467	(hal-00370353)
2010	C	HUILLET Th.	Siegmund duality with applications to the neutral Moran model conditioned on never being absorbed.	J. Phys. A: Math. Theor. 43	375001	(hal-00525962)
2010	C	HUILLET Th.	On discrete-time multiallelic evolutionary dynamics driven by selection.	Journal of Probability and Statistics vol. 2010	580762	(hal-00525968)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2010	D	BAL G., JOLLIVET A.	Stability for time-dependent inverse transport.	SIAM J. Math. Anal. 42 (2)	679-700	
2010	D	BAL G., JOLLIVET A., JUGNON V.	Inverse transport theory of photoacoustics.	Inverse Problems 26 (2)	025011	
2010	D	BILLAUD B., TRUONG T.T.	Some theoretical results on semiconductor spherical quantum dots.	Computational Materials Science 49 (1)	S322-S326	
2010	D	COURBAGE M., DURT T., SABERI FATHI S.M.	Dissipative dynamics of the kaon decay process.	Communications in Nonlinear Science and Numerical Simulations 15 (1)	71-78	
2010	D	DANDOLOFF R., SAXENA A., JENSEN B.	Geometry Induced Potential on a 2D-section of a Wormhole: Catenoid.	Phys. Rev. A 81	014102	
2010	D	ESQUE J., OQUEY C., de BREVERN A.G.	A Novel Evaluation of Residue and Protein Volumes by Means of Laguerre Tessellation.	Journal of chemical information and modeling 50 (5)	947-960	
2010	D	FOSTER D.P.	Surface critical behaviour of the Interacting Self-Avoiding Trail on the square lattice.	J. Phys. A: Math. Theor. 43	335004	(hal-00496965)
2010	D	HEDDI B., OQUEY C., LAVELLE C., FOLOPPE N., HARTMANN B.	Intrinsic flexibility of B-DNA : the experimental TRX scale.	NAR 38 (3)	1034-1047	
2010	D	JENSEN B., DANDOLOFF R.	Quantum mechanics of a constrained electrically charged particle in the presence of electric currents.	Phys. Rev. A 81	049905	
2010	D	MORVIDONE M., NGUYEN M.K., TRUONG T.T., ZAIDI H.	A novel V-line Radon transform and its imaging applications.	International Journal of Biomedical Imaging, Special issue on Mathematical Methods for Images and Surfaces Vol. 2010		
2010	D	NGUYEN M.K., TRUONG T.T.	Inversion of a new circular-arc Radon transform for Compton tomography.	Inverse Problems 26 (6)	065005	
2010	D	OQUEY C., FOLOPPE N., HARTMANN B.	Understanding the sequence dependence of DNA groove dimensions : Implications for dna interactions.	PLoS ONE 5 (12)	e15931	
2010	D	SABERI FATHI S.M.	Inversion formula for non-uniformly attenuated X-ray emission in three dimensions by using quaternionic analysis.	J. Phys. A: Math. Theor. 43	335202	
2010	D	SABERI FATHI S.M.	The R^3 exponential X-ray transform inversion in quaternion analysis.	J. Phys. A: Math. Theor. 43	295203	
2009	A	AZARIA P., CAPPONI S., LECHEMINANT P.	Three-Component Fermi gas in a one-dimensional optical lattice.	Physical Review A 80, Rapid Communications	041604®	(arXiv:0811.0555)
2009	A	BOULAT E., AZARIA P., LECHEMINANT P.	Duality approach to one-dimensional degenerate electronic systems.	Nuclear Physics B 822	367	(arXiv:0812.2620)
2009	A	BURGOS E., CEVA H, HERNANDEZ L., PERAZZO R.P.J.	Understanding and characterising nestedness in mutualistic bipartite networks.	Computer Physics Communications 180	532-535	

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2009	A	DIEP H.T., KAUFMAN M.	Extended Defects in the Potts-Percolation Model of a Solid: Renormalization Group and Monte Carlo Analysis.	Phys. Rev. E 80	031116	(hal-00384919)
2009	A	HERNANDEZ L., CEVA H.	On the application of the Critical Minimum Energy Subspace method to disordered systems.	Physica A 388	2389	(hal-00172027)
2009	A	KOWNACKI J.Ph., MOUHANNA D.	Crumpling transition and flat phase of polymerized phantom membranes.	Phys. Rev. E 79	040101®	(arXiv : 0811.0884)
2009	A	MATZKIN A.	Comment on Relevance of Bell's theorem as a signature of nonlocality: Case of classical angular momentum distributions.	Phys. Rev. A 79	046102	
2009	A	MATZKIN A.	Bohmian mechanics, the quantum-classical correspondence and the classical limit: the case of the square billiard.	Found. Phys. 39	903	
2009	A	MATZKIN A.	Bohmian mechanics and the emergence of classicality.	J. Phys.: Conf. Ser. 174	012039	
2009	A	PAM PHU X.T., NGO V.T., DIEP H.T.	Cross-Over from First to Second-Order Transition in Frustrated Ising Antiferromagnetic Films.	Phys. Rev. E 79	061106	(arXiv:0902.4310)
2009	A	PAM PHU X.T., NGO V.T., DIEP H.T.	Critical Behavior of Magnetic Thin Films.	Surface Science 603	109-116	(arXiv:0705.4044)
2009	A	ROUX G., CAPPONI S., LECHEMINANT P., AZARIA P.	Spin-3/2 fermions with attractive interactions in one-dimensional optical lattice: phase diagrams, entanglement entropy and effect of the trap.	Eur. Phys. J. B 68	293	(arXiv:0807.0412)
2009	B	AVAN J., DOIKOU A.	Boundary lax pairs from non-ultra local poisson algebras.	Journ. Math. Phys. 50	113512	(arXiv:0905.4134)
2009	B	AVAN J., DOIKOU A.	Boundary Lax pairs for the $A_n^{(1)}$ Toda field theories.	Nuclear Physics B 821	481-505	(arXiv:0809.2734)
2009	B	AVAN J., ROLLET G.	On Calogero-Francoise-type lax matrices and their dynamical r-matrices.	Journ. Math. Phys. 50	072701	(arXiv:0905.1810)
2009	B	BABELON O., CANTINI L., DOUCOT B.	A semiclassical study of the Jaynes-Cummings model.	J. Stat. Mech. Th. and Exp.	P07011	
2009	B	BAUER M., BERNARD D., CANTINI L.	Off-Critical SLE2 and SLE4 : a field theory approach.	Journal of Statistical Mechanics	07037	
2009	B	KITANINE N., KOZLOWSKI K.K., MAILLET J.M.	Riemann-Hilbert Approach to a Generalised Sine Kernel and Applications.	Comm. Math. Phys. 291(3)	691-761	
2009	B	KITANINE N., KOZLOWSKI K.K., MAILLET J.M.	Algebraic Bethe ansatz approach to the asymptotic behavior of correlation functions.	Jour. Stat. Mech. : Theor. Exp.	P04003	
2009	C	De CONINCK J., DUNLOP F., HUILLET Th.	Random walk versus random line.	Physica A : Stat. Mech. and its Appl. A 388	4034-4040	(hal-00375957)
2009	C	HUILLET Th.	Information and (co-)variances in discrete evolutionary genetics involving solely selection.	J. Stat Mech: Theory and Exp.	P09013	(arXiv:0908.3946)
2009	C	HUILLET Th.	Reversing the drift of the Ehrenfest urn model and three conditionings.	J. Phys. A : Math. and Theor. 42	345005	(hal-00392311)
2009	C	HUILLET Th.	Random walks pertaining to a class of deterministic weighted graphs.	J. Phys. A: Math. and Theor. 42	275001	(hal-00370026)

LPTM - Articles dans des revues internationales ou nationales avec comité de lecture

Année	Thème	Auteur(s)	Titre article	Revue	Pages	Archivage
2009	C	HUILLET Th.	Ancestral problems in population genetics : a short introduction.	Markov Processes and Related Fields 15 (3)	343-357	
2009	C	HUILLET Th.	A Duality Approach to the Genealogies of Discrete Non-Neutral Wright-Fisher models.	Journal of Probability and Statistics Vol. 2009	ID 714701	(arXiv :0811.1015)
2009	C	HUILLET Th., MOEHLE M.	Duality and asymptotics for a class of non-neutral discrete Moran models.	Journal of Applied Probability 46 (3)	866-893	(hal-00356083)
2009	C	HUILLET Th., PAROISSIN C.	Sampling from Dirichlet populations: Estimating the number of species.	Environmetrics, Applied Probability and Statistics vol. 20	853-876	(DOI:10.1002/env.977) (hal-00320181)
2009	D	ATANASOV V., DANDOLOFF R.	Qubits from tight knots and bent nano-bars.	Phys. Lett. A 373	716	
2009	D	ATANASOV V., DANDOLOFF R., SAXENA A.	Geometry-induced charge separation on a helicoidal ribbon.	Phys. Rev. B 79	033404	
2009	D	BAL G., JOLLIVET A.	Time-dependent angularly averaged inverse transport.	Inverse Problems 25(7)	075010	
2009	D	BILAUD B., PICCO M., TRUONG T.T.	Stark effect of interactive electron-hole pairs in spherical semiconductor quantum dots.	J. Condens. Matter 21	395302	
2009	D	DANDOLOFF R.	Quantum anticentrifugal force for wormhole geometry.	Phys. Lett. A 373	2667	
2009	D	FOSTER D.P.	Universality of collapsing two-dimensional self-avoiding trails.	J. Phys. A : Math. and Theor. 42	372002	(hal-00404443)
2009	D	FOSTER D.P., PINETTES C.	Bethe approximation for a DNA-like self-avoiding walk model with variable solvent quality.	Phys. Rev. E 79	051108	(hal-00365947)
2009	D	HYDE S.T., de CAMPO L., OGUEY C.	Tricontinuous mesophases of balanced three-arm "star polyphiles".	Soft Matter 5 (14)	2782-2794	
2009	D	JENSEN B., DANDOLOFF R.	Quantum mechanics of a constrained electrically charged particle in the presence of electric currents.	Phys. Rev. A 80	052109	
2009	D	JENSEN B., DANDOLOFF R.	Comment: Quantum mechanics of a constrained electrically charged particle in the presence of electric currents.	Phys. Rev. A 80	052109	
2009	D	JOLLIVET A.	On inverse scattering at high energies for the multidimensional Newton equation in electromagnetic field.	J. Inverse Ill-posed Probl. 17(5)	441-476	
2009	D	NGUYEN M.K., TRUONG T.T., DRIOL C., ZAIDI H.	On a novel approach to Compton scattered emission imaging.	IEEE Transactions in Nuclear Sciences 56 (3)	1430-1437	
2009	D	SABERI FATHI S.M., TRUONG T.T.	On the inverse of the directional derivative operator in R^N .	J. Phys. A: Math. Theor. 42(4)	045203	
2009	D	SABERI FATHI S.M., TRUONG T.T., NGUYEN M.K.	Quaternionic approach to X-ray transform inversion in R^3 .	J. Phys. A: Math. Theor. 42	0415205	