

Publications 2024 de l'Institut de Mathématiques de Bourgogne

Articles de revues

1. Alonso Juan, Alvarez Sébastien, Malicet Dominique, Meniño Cotón Carlos, Triestino Michele (2024). Ping-pong partitions and locally discrete groups of real-analytic circle diffeomorphisms, I: Construction. *Journal of Combinatorial Algebra*, 8(1/2):57-109. URL: <https://ems.press/journals/jca/articles/13588386>. DOI: <https://doi.org/10.4171/jca/78>. Réf. HAL: [hal-02153478](https://hal.archives-ouvertes.fr/hal-02153478) - [OA HAL](#)
2. Asaoka Masayuki, Bonatti Christian, Marty Théo (2024). Oriented Birkhoff sections of Anosov flows. *Journal of topology*, 17(4). URL: <https://londmathsoc.onlinelibrary.wiley.com/doi/10.1112/topo.12356>. DOI: <https://doi.org/10.1112/topo.12356>. Réf. HAL: [hal-04790989](https://hal.archives-ouvertes.fr/hal-04790989) - [OA hors HAL](#)
3. Balhag Aïcha, Mazgouri Z., Théra M. (2024). Convergence of inertial prox-penalization and inertial forward-backward algorithms for solving monotone bilevel equilibrium problems. *Optimization*. URL: <https://www.tandfonline.com/doi/full/10.1080/02331934.2024.2341934>. DOI: <https://doi.org/10.1080/02331934.2024.2341934>. Réf. HAL: [hal-04814940](https://hal.archives-ouvertes.fr/hal-04814940)
4. Bardey Aurore, Radclyffe-Thomas Natascha, Tassell Catriona, Labruère Chazal Catherine, Pejsak Nia (2024). 'Older People are not Allowed to be old Anymore': Representation, Stereotyping and Psychological Impact of Ageism in the Fashion media. *Journal of Macromarketing*. URL: <https://journals.sagepub.com/doi/10.1177/02761467241302462>. DOI: <https://doi.org/10.1177/02761467241302462>. Réf. HAL: [hal-04854103](https://hal.archives-ouvertes.fr/hal-04854103)
5. Barros Diego, Bonatti Christian, Pacifico Maria José (2024). Upper, down, two-sided Lorenz attractor, collisions, merging, and switching. *Ergodic Theory and Dynamical Systems*, 44(10):2737-2781. URL: <https://www.cambridge.org/core/journals/ergodic-theory-and-dynamical-systems/article/upper-down-twosided-lorenz-attractor-collisions-merging-and-switching/E8B68E2FoAB920A43BA2F96214A9D8E2>. DOI: <https://doi.org/10.1017/etds.2024.8>. Réf. HAL: [hal-04781964](https://hal.archives-ouvertes.fr/hal-04781964) - [OA hors HAL](#)
6. Benedetti Vladimiro, Bolognesi Michele, Faenzi Daniele, Manivel Laurent (2024). The Coble Quadric. *Forum of Mathematics, Sigma*, 12e63. URL: <https://www.cambridge.org/core/journals/forum-of-mathematics-sigma/article/coble-quadric/C1266FBBDCB4A37ABFE27BD8C50D2Do>. DOI: <https://doi.org/10.1017/fms.2024.52>. Réf. HAL: [hal-04158249](https://hal.archives-ouvertes.fr/hal-04158249) - [OA HAL](#)

7. Benedetti Vladimiro, Faenzi Daniele (2024). Rationality of Peskine varieties. *Mathematische Zeitschrift*, 307(2):26. URL: <https://link.springer.com/article/10.1007/s00209-024-03498-5>. DOI: <https://doi.org/10.1007/s00209-024-03498-5>. Réf. HAL: [hal-04836759](https://hal.archives-ouvertes.fr/hal-04836759)

8. Bertolim Maria Alice, Bonatti Christian, Mello Margarida Pinheiro, Vago Gioia Maria (2024). Minimal number of periodic orbits for non-singular Morse–Smale flows in odd dimension. *Fundamenta Mathematicae*, 267(1):25–85. URL: <https://www.impan.pl/en/publishing-house/journals-and-series/fundamenta-mathematicae/all/267/1/115629/minimal-number-of-periodic-orbits-for-non-singular-morse-smale-flows-in-odd-dimension>. DOI: <https://doi.org/10.4064/fm231019-5-7>. Réf. HAL: [hal-04784327](https://hal.archives-ouvertes.fr/hal-04784327)

9. Bitseki Penda S. Valère (2024). Central limit theorem for bifurcating Markov chains: the mother-daughters triangles case. *Stochastics: An International Journal of Probability and Stochastic Processes*. DOI: <https://doi.org/10.1080/17442508.2023.2295847>. Réf. HAL: [hal-04599933](https://hal.archives-ouvertes.fr/hal-04599933)

10. Bitseki Penda S. Valère (2024). Kernel estimation of the transition density in bifurcating Markov chains. *Journal of Statistical Planning and Inference*, 231:106138. URL: <https://www.sciencedirect.com/science/article/abs/pii/S0378375823001076>. DOI: <https://doi.org/10.1016/j.jspi.2023.106138>. Réf. HAL: [hal-04813920](https://hal.archives-ouvertes.fr/hal-04813920)

11. Bonatti Christian, Carnevale João, Triestino Michele (2024). Non-locally discrete actions on the circle with at most N fixed points. *Mathematische Zeitschrift*, 307(1):6. URL: <https://link.springer.com/article/10.1007/s00209-024-03482-z>. DOI: <https://doi.org/10.1007/s00209-024-03482-z>. Réf. HAL: [hal-04536542](https://hal.archives-ouvertes.fr/hal-04536542) - [OA HAL](https://hal.archives-ouvertes.fr/hal-04536542)

12. Bonatti Christian, Shinohara Katsutoshi (2024). A mechanism for ejecting a horseshoe from a partially hyperbolic chain recurrence class. *Ergodic Theory and Dynamical Systems*, 44(8):2080–2142. URL: <https://www.cambridge.org/core/journals/ergodic-theory-and-dynamical-systems/article/mechanism-for-ejecting-a-horseshoe-from-a-partially-hyperbolic-chain-recurrence-class/B7EB6AB3D9D08FEA7452B8BE34C722A0>. DOI: <https://doi.org/10.1017/etds.2023.76>. Réf. HAL: [hal-04362255](https://hal.archives-ouvertes.fr/hal-04362255) - [OA hors HAL](https://hal.archives-ouvertes.fr/hal-04362255)

13. Bonatti Christian (2024). Action on the circle at infinity of foliations of \mathbb{R}^2 . *L'Enseignement Mathématique*. URL: <https://ems.press/journals/lem/articles/14297920>. DOI: <https://doi.org/10.4171/LEM/1086>. Réf. HAL: [hal-04784210](https://hal.archives-ouvertes.fr/hal-04784210) - [OA hors HAL](https://hal.archives-ouvertes.fr/hal-04784210)

14. Bonatti Christian, Shinohara Katsutoshi (2024). Aperiodic chain recurrence classes of C^1 -generic diffeomorphisms. *Inventiones Mathematicae*, 238(2):637–689. URL: <https://link.springer.com/article/10.1007/s00222-024-01290-0>. DOI: <https://doi.org/10.1007/s00222-024-01290-0>. Réf. HAL: [hal-04784216](https://hal.archives-ouvertes.fr/hal-04784216)

15. Bonnard Bernard, Rouot Jérémy (2024). Feedback Classification and Optimal Control with Applications to the Controlled Lotka-Volterra Model. *Optimization*. URL: <https://www.tandfonline.com/doi/full/10.1080/02331934.2024.2392209>. DOI: <https://doi.org/10.1080/02331934.2024.2392209>

<https://doi.org/10.1080/02331934.2024.2392209>. Réf. HAL: [hal-03917363](https://hal.archives-ouvertes.fr/hal-03917363) - [OA HAL](#)

16. [Bonnard Bernard](#), [Rouot Jérémy](#), [Silva Cristiana](#) (2024). Geometric Optimal Control of the Generalized Lotka-Volterra Model of the Intestinal Microbiome. *Optimal Control Applications and Methods*. URL: <https://onlinelibrary.wiley.com/doi/abs/10.1002/oca.3089?msockid=070bf1258a376b361f5ce5cf8b996a91>. DOI: <https://doi.org/10.1002/oca.3089>. Réf. HAL: [hal-03861565](https://hal.archives-ouvertes.fr/hal-03861565) - [OA HAL](#)

17. [Bourredjem Abderrahmane](#), [Cardot Hervé](#), [Devilliers Hervé](#) (2024). CO7.3 - Intervalle de confiance asymptotique et formules de taille d'échantillon pour l'Intra-classe de concordance à deux voies dans les études de fiabilité inter-juge. *Journal of Epidemiology and Population Health*, 72(2):202422. URL: <https://www.sciencedirect.com/science/article/pii/S2950433324002325>. DOI: <https://doi.org/10.1016/j.jep.2024.202422>. Réf. HAL: [hal-04851973](https://hal.archives-ouvertes.fr/hal-04851973)

18. [Bourredjem Abderrahmane](#), [Fournel Isabelle](#), [El Saadi N.](#) (2024). P54 - Transformation de stabilisation de la variance pour l'intra-classe de concordance à deux voies et exemple d'application à une méta-analyse d'études de fiabilité inter-juge. *Journal of Epidemiology and Population Health*, 72:202494. URL: <https://www.sciencedirect.com/science/article/pii/S2950433324003045>. DOI: <https://doi.org/10.1016/j.jep.2024.202494>. Réf. HAL: [hal-04852040](https://hal.archives-ouvertes.fr/hal-04852040)

19. [Bourredjem Abderrahmane](#), [Cardot Hervé](#), [Devilliers Hervé](#) (2024). Asymptotic Confidence Interval, Sample Size Formulas and Comparison Test for the Agreement Intra-Class Correlation Coefficient in Inter-Rater Reliability Studies. *Statistics in Medicine*, 43(27):5060-5076. URL: <https://onlinelibrary.wiley.com/doi/10.1002/sim.10217?msockid=070bf1258a376b361f5ce5cf8b996a91>. DOI: <https://doi.org/10.1002/sim.10217>. Réf. HAL: [hal-04824085](https://hal.archives-ouvertes.fr/hal-04824085) - [OA hors HAL](#)

20. [Boyanov Valentin](#), [Cardoso Vitor](#), [Destounis Kyriakos](#), [Jaramillo José Luis](#), [Macedo Rodrigo Panosso](#) (2024). Structural aspects of the anti-de Sitter black hole pseudospectrum. *Physical Review D*, 109(6):064068. URL: <https://journals.aps.org/prd/abstract/10.1103/PhysRevD.109.064068>. DOI: <https://doi.org/10.1103/PhysRevD.109.064068>. Réf. HAL: [hal-04841318](https://hal.archives-ouvertes.fr/hal-04841318) - [OA hors HAL](#)

21. [Brum Joaquín](#), [Matte Bon Nicolás](#), [Rivas Cristóbal](#), [Triestino Michele](#) (2024). A realisation result for moduli spaces of group actions on the line. *Journal of topology*, 17(4). URL: <https://londmathsoc.onlinelibrary.wiley.com/doi/10.1112/topo.12357>. DOI: <https://doi.org/10.1112/topo.12357>. Réf. HAL: [hal-04152113](https://hal.archives-ouvertes.fr/hal-04152113) - [OA HAL](#)

22. [Cardot Hervé](#), [Frascolla Cindy](#) (2024). Hypothesis testing for Panels of Semi-Markov Processes with parametric sojourn time distributions. *Journal of Statistical Planning and Inference*, 228:59-79. URL: <https://www.sciencedirect.com/science/article/abs/pii/S0378375823000459>. DOI: <https://doi.org/10.1016/j.jspi.2023.06.004>. Réf. HAL: [hal-04362190](https://hal.archives-ouvertes.fr/hal-04362190) - [OA hors HAL](#)

23. Carlier Guillaume, Dupuis Xavier, Rochet Jean-Charles, Thanassoulis John (2024). A General Solution to the Quasi Linear Screening Problem. *Journal of Mathematical Economics*, 114. URL: <https://www.sciencedirect.com/science/article/abs/pii/S0304406824000855>. DOI: <https://doi.org/10.1016/j.jmateco.2024.103025>. Réf. HAL: [hal-04598698](https://hal.archives-ouvertes.fr/hal-04598698) - [OA HAL](#)
24. Carrozza Sylvain, Eccles Stefan, Hoehn Philipp (2024). Edge modes as dynamical frames: charges from post-selection in generally covariant theories. *SciPost Physics*, 17(2):048. URL: <https://scipost.org/10.21468/SciPostPhys.17.2.048>. DOI: <https://doi.org/10.21468/SciPostPhys.17.2.048>. Réf. HAL: [hal-04760390](https://hal.archives-ouvertes.fr/hal-04760390) - [OA hors HAL](#)
25. Chenavier Nicolas, Darwiche Ahmad, Rousselle Arnaud (2024). Compound Poisson approximation for simple transient random walks in random sceneries. *ALEA : Latin American Journal of Probability and Mathematical Statistics*, 21(1):293. URL: <https://alea.impa.br/articles/v21/21-12.pdf>. DOI: <https://doi.org/10.30757/ALEA.v21-12>. Réf. HAL: [hal-04066232](https://hal.archives-ouvertes.fr/hal-04066232) - [OA HAL](#)
26. Cluckers Raf, Comte Georges, Rolin Jean-Philippe, Servi Tamara (2024). Mellin transforms of power-constructible functions. *Advances in Mathematics*, 459:110025. URL: <https://www.sciencedirect.com/science/article/abs/pii/S0001870824005413>. DOI: <https://doi.org/10.1016/j.aim.2024.110025>. Réf. HAL: [hal-04195048](https://hal.archives-ouvertes.fr/hal-04195048) - [OA HAL](#)
27. Coburn Lewis, Hitrik Michael, Sjöstrand Johannes (2024). Characterizing Boundedness of Metaplectic Toeplitz Operators. *International Mathematics Research Notices*, 2024(10):8264-8281. URL: <https://academic.oup.com/imrn/advance-article-abstract/doi/10.1093/imrn/rnad161/7256158?redirectedFrom=fulltext>. DOI: <https://doi.org/10.1093/imrn/rnad161>. Réf. HAL: [hal-04315510](https://hal.archives-ouvertes.fr/hal-04315510) - [OA hors HAL](#)
28. Coulon Rémi (2024). Patterson-Sullivan theory for groups with a strongly contracting element. *Ergodic Theory and Dynamical Systems*. DOI: <https://doi.org/10.1017/etds.2024.10>. Réf. HAL: [hal-03698536](https://hal.archives-ouvertes.fr/hal-03698536) - [OA hors HAL](#)
29. Coutant Antonin, Zheng Li-Yang, Achilleos Vassos, Richoux Olivier, Theocharis Georgios, Pagneux Vincent (2024). Topologically Invisible Defects in Chiral Mirror Lattices. *Advanced Physics Research*, 3(4). URL: <https://onlinelibrary.wiley.com/doi/full/10.1002/apxr.202300102?msocid=070bf1258a376b361f5ce5cf8b996a91>. DOI: <https://doi.org/10.1002/apxr.202300102>. Réf. HAL: [hal-04784178](https://hal.archives-ouvertes.fr/hal-04784178) - [OA HAL](#)
30. Cumplido María, Gavazzi Federica, Paris Luis (2024). Intersection of parabolic subgroups in Euclidean braid groups: a short proof. *Comptes Rendus. Mathématique*, 362(G11):1445-1448. URL: <https://comptes-rendus.academie-sciences.fr/mathematique/articles/10.5802/crmath.656/>. DOI: <https://doi.org/10.5802/crmath.656>. Réf. HAL: [hal-04836461](https://hal.archives-ouvertes.fr/hal-04836461)
31. Deaconu Madalina, Herrmann Samuel (2024). Strong approximation of some particular

one-dimensional diffusions. *Discrete and Continuous Dynamical Systems - Series B*, 29(4):1990-2017. URL: <https://www.aims sciences.org/article/doi/10.3934/dcdsb.2023164>. Réf. HAL: [hal-02799638](https://hal.archives-ouvertes.fr/hal-02799638) - [OA HAL](#)

32. Deleporte Alix, Hitrik Michael, Sjöstrand Johannes (2024). A direct approach to the analytic Bergman projection. *Annales de la Faculté des Sciences de Toulouse. Mathématiques.*, 33(1):153-176. URL: <https://afst.centre-mersenne.org/articles/10.5802/afst.1765/>. DOI: <https://doi.org/10.5802/afst.1765>. Réf. HAL: [hal-04843409](https://hal.archives-ouvertes.fr/hal-04843409) - [OA hors HAL](#)

33. Detcherry Renaud, Le Fil Thomas, Santharoubane Ramanujan (2024). Compatible pants decomposition for $SL_2(\mathbb{C})$ representations of surface groups. *Groups, Geometry, and Dynamics*. URL: <https://ems.press/journals/ggd/articles/14298174>. DOI: <https://doi.org/10.4171/ggd/797>. Réf. HAL: [hal-04828926](https://hal.archives-ouvertes.fr/hal-04828926)

34. Dubouloz Adrien, Kishimoto Takashi, Nagaoka Masaru (2024). Completions of the affine 3-space into del Pezzo fibrations. *Annali dell'Universita di Ferrara*, 70(3):731-759. URL: <https://link.springer.com/article/10.1007/s11565-024-00499-4>. DOI: <https://doi.org/10.1007/s11565-024-00499-4>. Réf. HAL: [hal-04869917](https://hal.archives-ouvertes.fr/hal-04869917)

35. Dubouloz Adrien, Kishimoto Takashi, Montero Pedro (2024). Del Pezzo quintics as equivariant compactifications of vector groups. *Algebraic Geometry*, 11(4):593-619. URL: <https://algebraicgeometry.nl/issues/65>. DOI: <https://doi.org/10.14231/AG-2024-018>. Réf. HAL: [hal-04870044](https://hal.archives-ouvertes.fr/hal-04870044) - [OA hors HAL](#)

36. De Laroche Lambert Quentin, Hamri Imad, Chassard Tom, Meignié Alice, Storme Florent, Dupuit Marine, Diry Allison, Toussaint Jean-François, Louis Pierre-Yves, Coulmy Nicolas, Antero Juliana Da Silva (2024). Exploring the effect of the menstrual cycle or oral contraception on elite athletes' training responses when workload is not objectively quantifiable: the MILS approach and findings from female Olympians. *BMJ Open Sport and Exercise Medicine*, 10(2)e001810. URL: <https://bmjopensem.bmj.com/content/10/2/e001810>. DOI: <https://doi.org/10.1136/bmjsem-2023-001810>. Réf. HAL: [hal-04621045](https://hal.archives-ouvertes.fr/hal-04621045) - [OA HAL](#)

37. De Leon Eddy, Frauendiener Jörg, Klein Christian (2024). Visualisation of counter-rotating dust disks using ray tracing methods. *Classical and Quantum Gravity*, 41(15):155005. URL: <https://iopscience.iop.org/article/10.1088/1361-6382/ad58cb>. DOI: <https://doi.org/10.1088/1361-6382/ad58cb>. Réf. HAL: [hal-04828947](https://hal.archives-ouvertes.fr/hal-04828947) - [OA hors HAL](#)

38. Faenzi Daniele, Jardim Marcos, Vallès Jean (2024). Saito criterion and its avatars. *Rendiconti del Circolo Matematico di Palermo*, 73(6):2233-2243. URL: <https://link.springer.com/article/10.1007/s12215-024-01061-z>. DOI: <https://doi.org/10.1007/s12215-024-01061-z>. Réf. HAL: [hal-04817045](https://hal.archives-ouvertes.fr/hal-04817045)

39. Fairon Maxime (2024). Modified double brackets and a conjecture of S. Arthamonov. *Communications in Mathematics, Special issue: European Non-Associative Algebra Seminar*, 33(5), pp.1-31. URL : <https://cm.episciences.org/14442>. DOI : [10.46298/cm.13786](https://doi.org/10.46298/cm.13786). Réf HAL :

[hal-04775878](#)

40. Filoche Baptiste, Hohenegger Stefan, [Kimura Taro](#) (2024). Non-perturbative Symmetries of Little Strings and Affine Quiver Algebras. *Journal of High Energy Physics*, 2024(2):233. URL: [https://link.springer.com/article/10.1007/JHEP02\(2024\)233](https://link.springer.com/article/10.1007/JHEP02(2024)233). DOI: [https://doi.org/10.1007/JHEP02\(2024\)233](https://doi.org/10.1007/JHEP02(2024)233). Réf. HAL: [hal-04274560](#) - [OA HAL](#)

41. [Gaillard Pierre](#) (2024). Fredholm Determinant and Wronskian Representations of the Solutions to the Schrödinger Equation with a KdV-Potential. *Axioms*, 13(10):712. URL: <https://www.mdpi.com/2075-1680/13/10/712>. DOI: <https://doi.org/10.3390/axioms13100712>. Réf. HAL: [hal-04824146](#)

42. [Gaillard Pierre](#) (2024). From Algebro Geometric Solutions of the Toda Equation to Sato Formulas. *AppliedMath*, 2024, 4 (3), pp.856-867. URL : <https://www.mdpi.com/2673-9909/4/3/46>. DOI: [10.3390/appliedmath4030046](https://doi.org/10.3390/appliedmath4030046). Réf HAL : [hal-04920776](#)

43. [Gaillard Pierre](#) (2024). Multi-parametric solutions to the functional difference KdV equation. *Wave Motion*, 130:103385. URL: <https://www.sciencedirect.com/science/article/abs/pii/S016521252400115X>. DOI: <https://doi.org/10.1016/j.wavemoti.2024.103385>. Réf. HAL: [hal-04841212](#)

44. [Gaillard Pierre](#) (2024). Rational Solutions to the Fourth Equation of the Nonlinear Schrödinger Hierarchy. *AppliedMath*, 2024, 4 (4), pp.1418-1427. URL : <https://www.mdpi.com/2673-9909/4/4/75>. DOI: [10.3390/appliedmath4040075](https://doi.org/10.3390/appliedmath4040075). [hal-04920786](#)

45. [Gaillard Pierre](#) (2024). Rational Solutions to the KPI Equation as Multi-lumps with a One Degree of Summation. *International Journal of Applied and Computational Mathematics*, 10(3):94. URL: <https://link.springer.com/article/10.1007/s40819-024-01694-9>. DOI: <https://doi.org/10.1007/s40819-024-01694-9>. Réf. HAL: [hal-04841233](#)

46. [Gaillard Pierre](#) (2024). Solutions of the functional difference Toda equation from centered Darboux transformation. *Aequationes Mathematicae*. URL : <https://link.springer.com/article/10.1007/s00010-024-01097-7>. DOI : [10.1007/s00010-024-01097-7](https://doi.org/10.1007/s00010-024-01097-7). Réf HAL : [hal-04920740](#)

47. Gavrilyuk Sergey, [Klein Christian](#) (2024). Numerical study of the Serre–Green–Naghdi equations in 2D. *Nonlinearity*, 37(4):045014. URL: <https://iopscience.iop.org/article/10.1088/1361-6544/ad2eb8>. DOI: <https://doi.org/10.1088/1361-6544/ad2eb8>. Réf. HAL: [hal-04814853](#)

48. Gismatullin Jakub, [Tardivel Patrick](#) (2024). Beta distribution and associated Stirling numbers of the second kind. *Probability and Mathematical Statistics (Pol)*, 44(1):119-132. Réf. HAL: [hal-04367027](#) - [OA HAL](#)

49. [Gutierrez Guillen Gabriela](#), [Sugny Dominique](#), [Mardešić Pavao](#) (2024). Hamiltonian

- Monodromy via spectral Lax pairs. *Journal of Mathematical Physics*, 65(3). URL: <https://pubs.aip.org/aip/jmp/article-abstract/65/3/032703/3277848/Hamiltonian-Monodromy-via-spectral-Lax-pairs?redirectedFrom=fulltext>. DOI: <https://doi.org/10.1063/5.0098005>. Réf. HAL: [hal-04814832](https://hal.archives-ouvertes.fr/hal-04814832) - [OA hors HAL](#)
50. Helffer Bernard, Sjöstrand Johannes, Viola Joe (2024). Discussing Semigroup Bounds with Resolvent Estimates. *Integral Equations and Operator Theory*, 96(1):5. URL: <https://link.springer.com/article/10.1007/s00020-024-02754-x>. DOI: <https://doi.org/10.1007/s00020-024-02754-x>. Réf. HAL: [hal-04843427](https://hal.archives-ouvertes.fr/hal-04843427)
51. Jaramillo José Luis, Macedo Rodrigo P., Meneses-Rojas Oscar, Raffaelli Bernard, Sheikh Lamis Al (2024). A Weyl's law for black holes. *Physical Review D*, 110(10):104008. URL: <https://journals.aps.org/prd/abstract/10.1103/PhysRevD.110.104008>. DOI: <https://doi.org/10.1103/PhysRevD.110.104008>. Réf. HAL: [hal-03921051](https://hal.archives-ouvertes.fr/hal-03921051) - [OA hors HAL](#)
52. Jaramillo José Luis, Lenzi Michele, Sopena Carlos (2024). Integrability in perturbed black holes: Background hidden structures. *Physical Review D*, 110(10):104049. URL: <https://journals.aps.org/prd/abstract/10.1103/PhysRevD.110.104049>. DOI: <https://doi.org/10.1103/PhysRevD.110.104049>. Réf. HAL: [hal-04836507](https://hal.archives-ouvertes.fr/hal-04836507)
53. Kimura Taro, Noshita Go (2024). Gauge origami and quiver W-algebras. *Journal of High Energy Physics*, (5):208. URL: [https://link.springer.com/article/10.1007/JHEP05\(2024\)208](https://link.springer.com/article/10.1007/JHEP05(2024)208). DOI: [https://doi.org/10.1007/jhep05\(2024\)208](https://doi.org/10.1007/jhep05(2024)208). Réf. HAL: [hal-04240107](https://hal.archives-ouvertes.fr/hal-04240107) - [OA HAL](#)
54. Kimura Taro, Lee Norton (2024). Generalized Calogero-Moser system and supergroup gauge origami. *Nuclear Physics B*, 1005:116604. DOI: <https://doi.org/10.48550/arXiv.2404.01844>. Réf. HAL: [hal-04545236](https://hal.archives-ouvertes.fr/hal-04545236) - [OA hors HAL](#)
55. Kimura Taro, Zahabi Ali (2024). Universal Cusp Scaling in Random Partitions. *Letters in Mathematical Physics*, 114(1):27. URL: <https://link.springer.com/article/10.1007/s11005-024-01771-6>. DOI: <https://doi.org/10.1007/s11005-024-01771-6>. Réf. HAL: [hal-04197441](https://hal.archives-ouvertes.fr/hal-04197441) - [OA HAL](#)
56. Klein Christian, Linares Felipe, Pilod Didier, Saut Jean-Claude (2024). On the Benjamin and Related Equations. *Boletim da Sociedade Brasileira de Matemática / Bulletin of the Brazilian Mathematical Society*, 56(1):4. URL: <https://link.springer.com/article/10.1007/s00574-024-00428-1>. DOI: <https://doi.org/10.1007/s00574-024-00428-1>. Réf. HAL: [hal-04850444](https://hal.archives-ouvertes.fr/hal-04850444)
57. Klein Christian, Stoilov Nikola (2024). Multidomain spectral approach to rational-order fractional derivatives. *Studies in Applied Mathematics*, 152(4):1110-1132. URL: <https://onlinelibrary.wiley.com/doi/full/10.1111/sapm.12671?msocid=070bf1258a376b361f5ce5cf8b996a91>. DOI: <https://doi.org/10.1111/sapm.12671>. Réf. HAL: [hal-04813901](https://hal.archives-ouvertes.fr/hal-04813901) - [OA hors HAL](#)
58. Klein Christian, Oruc Goksu (2024). Numerical study of fractional Camassa–Holm equations. *Physica D: Nonlinear Phenomena*, 457:133979. URL:

<https://www.sciencedirect.com/science/article/pii/S0167278923003330>. DOI:
<https://doi.org/10.1016/j.physd.2023.133979>. Réf. HAL: [hal-04353946](https://hal.archives-ouvertes.fr/hal-04353946) - [OA hors HAL](#)

59. Klein Christian, Saut Jean-Claude (2024). Numerical study of the Amick–Schonbek system. *Studies in Applied Mathematics*, 153(1). URL: <https://onlinelibrary.wiley.com/doi/full/10.1111/sapm.12691?msocid=070bf1258a376b361f5ce5cf8b996a91>. DOI: <https://doi.org/10.1111/sapm.12691>. Réf. HAL: [hal-04814877](https://hal.archives-ouvertes.fr/hal-04814877) - [OA hors HAL](#)

60. Klopfenstein Quentin, Bertrand Quentin, Gramfort Alexandre, Salmon Joseph, Vaiter S. (2024). Local linear convergence of proximal coordinate descent algorithm. *Optimization Letters*, 18:135-154. URL: <https://link.springer.com/article/10.1007/s11590-023-01976-z>. DOI: <https://doi.org/10.1007/s11590-023-01976-z>. Réf. HAL: [hal-04308828](https://hal.archives-ouvertes.fr/hal-04308828)

61. Langevin Rémi (2024). Newton lenses. *Research in the Mathematical Sciences*, 11(2):36. URL: <https://link.springer.com/article/10.1007/s40687-024-00441-2>. DOI: <https://doi.org/10.1007/s40687-024-00441-2>. Réf. HAL: [hal-04814954](https://hal.archives-ouvertes.fr/hal-04814954)

62. Marty Théo (2024). Reeb–Anosov flows are skewed R-covered, shorter proof. *Journal of Fixed Point Theory and Applications*, 26(4):58. URL: <https://link.springer.com/article/10.1007/s11784-024-01147-2>. DOI: <https://doi.org/10.1007/s11784-024-01147-2>. Réf. HAL: [hal-04843634](https://hal.archives-ouvertes.fr/hal-04843634)

63. Moser-Jauslin Lucy, Terpereau Ronan (2024). Forms of almost homogeneous varieties over perfect fields. *Annales Henri Lebesgue*, 7:357-407. URL: <https://ahl.centre-mersenne.org/articles/10.5802/ahl.203/>. DOI: <https://doi.org/10.5802/ahl.203>. Réf. HAL: [hal-04837327](https://hal.archives-ouvertes.fr/hal-04837327) - [OA hors HAL](#)

64. Möller Philip, Paris Luis, Varghese Olga (2024). On parabolic subgroups of Artin groups. *Israel Journal of Mathematics*, 261(2):809-840. URL: <https://link.springer.com/article/10.1007/s11856-023-2597-2>. DOI: <https://doi.org/10.1007/s11856-023-2597-2>. Réf. HAL: [hal-04870220](https://hal.archives-ouvertes.fr/hal-04870220) - [OA hors HAL](#)

65. Müller Lukas, Woike Lukas (2024). The distinguished invertible object as ribbon dualizing object in the Drinfeld center. *Selecta Mathematica (New Series)*, 30(5):98. URL: <https://link.springer.com/article/10.1007/s00029-024-00975-x>. DOI: <https://doi.org/10.1007/s00029-024-00975-x>. Réf. HAL: [hal-04023248](https://hal.archives-ouvertes.fr/hal-04023248) - [OA hors HAL](#)

66. Paris Luis, Varghese Olga (2024). Narrow normal subgroups of Coxeter groups and of automorphism groups of Coxeter groups. *Journal of Group Theory*, 27(2):255-274. URL: <https://www.degruyter.com/document/doi/10.1515/jgth-2022-0202/html>. DOI: <https://doi.org/10.1515/jgth-2022-0202>. Réf. HAL: [hal-04334887](https://hal.archives-ouvertes.fr/hal-04334887) - [OA hors HAL](#)

67. Paris Luis, Varghese Olga (2024). The spherical growth series of Dyer groups. *Proceedings of the Edinburgh Mathematical Society*, 67(1):168-187. URL: <https://www.cambridge.org/core/journals/proceedings-of-the-edinburgh-mathematical->

[society/article/abs/spherical-growth-series-of-dyer-groups/51B121A8DF594E66B5F4703E7E5429FC](#). DOI: <https://doi.org/10.1017/S0013091523000743>. Réf. HAL: [hal-04379841](#)

68. [Peng Keyao](#) (2024). Milnor-Witt motivic cohomology and linear algebraic groups. *Advances in Mathematics*, 458:109973. URL: <https://www.sciencedirect.com/science/article/abs/pii/S0001870824004882>. DOI: <https://doi.org/10.1016/j.aim.2024.109973>. Réf. HAL: [hal-04843671](#) - [OA hors HAL](#)

69. [Rolin Jean-Philippe](#), [Servi Tamara](#), [Speisegger Patrick](#) (2024). Multisummability for generalized power series. *Canadian Journal of Mathematics*, 76(2):458-494. URL: <https://www.cambridge.org/core/journals/canadian-journal-of-mathematics/article/multisummability-for-generalized-power-series/1F6BE1507F1AE266CDBF06CF3E2CDE86>. DOI: <https://doi.org/10.4153/S0008414X23000111>. Réf. HAL: [hal-03836697](#) - [OA HAL](#)

70. [Rosas-Soto Iván](#) (2024). Étale degree map and o-cycles. *Journal of Algebra*, 665:384-414. URL: <https://www.sciencedirect.com/science/article/pii/S0021869324005957#:~:text=We%20define%20the%20zero%20cycles%20of%20X%20C%20denoted,%E2%86%A6%20%E2%88%91%20x%20n%20x%20%5Bk%20%28x%29%3A%20k%5D.> DOI: <https://doi.org/10.1016/j.jalgebra.2024.10.036>. Réf. HAL: [hal-04832796](#) - [OA hors HAL](#)

71. [Rousselle Arnaud](#), [Sönmez Ercan](#) (2024). The longest edge in discrete and continuous long-range percolation. *Extremes*, 27(4):673-703. URL: <https://link.springer.com/article/10.1007/s10687-024-00488-y>. DOI: <https://doi.org/10.1007/s10687-024-00488-y>. Réf. HAL: [hal-04817025](#)

72. [Rousselle Arnaud](#), [Sönmez Ercan](#) (2024). The longest edge of the one-dimensional soft random geometric graph with boundaries. *Stochastic Models*, 40(2):399-416. URL: <https://www.tandfonline.com/doi/abs/10.1080/15326349.2023.2256825>. DOI: <https://doi.org/10.1080/15326349.2023.2256825>. Réf. HAL: [hal-04322769](#) - [OA hors HAL](#)

73. [Sjöstrand Johannes](#), [Vogel Martin](#) (2024). Tunneling for the derivative-operator. *Vietnam Journal of Mathematics*, 52(4):1017-1041. URL: <https://link.springer.com/journal/10013/volumes-and-issues>. DOI: <https://doi.org/10.1007/s10013-024-00692-0>. Réf. HAL: [hal-04237820](#) - [OA hors HAL](#)

74. [Triestino Michele](#) (2024). Non-smoothability for a class of groups of piecewise linear homeomorphisms of the interval. *Annales de l'Institut Fourier*, 74(3):1095-1108. URL: <https://aif.centre-mersenne.org/articles/10.5802/aif.3626/>. DOI: <https://doi.org/10.5802/aif.3626>. Réf. HAL: [hal-04579769](#) - [OA HAL](#)

Ouvrages et chapitres d'ouvrages

1. Bonnard Bernard, Chyba Monique, Holcman David, Trélat Emmanuel (2024). Ivan Kupka Legacy: A Tour Through Controlled Dynamics, AIMS, 12. URL: <https://www.aims sciences.org/book/AM/volume/58>. Réf. HAL: [hal-04869632](https://hal.archives-ouvertes.fr/hal-04869632)
2. Bonnard Bernard, Rouot Jérémy (2024). Optimal Control of the Lotka-Volterra Equations with Applications, In AIMS on Applied Mathematics (dir.), IVAN KUPKA LEGACY: A Tour Through Controlled Dynamics, 12:27-45. Réf. HAL: [hal-03829465](https://hal.archives-ouvertes.fr/hal-03829465) - [OA HAL](https://oahal.archives-ouvertes.fr/hal-03829465)
3. Bonnard Bernard, Cots Olivier, Privat Yannick, Trélat Emmanuel (2024). Zermelo navigation on the sphere with revolution metrics, IVAN KUPKA LEGACY: A Tour Through Controlled Dynamics, 12:35-66. Réf. HAL: [hal-04433828](https://hal.archives-ouvertes.fr/hal-04433828) - [OA HAL](https://oahal.archives-ouvertes.fr/hal-04433828)
4. Dolecki Szymon (2024). A Royal Road to Topology: Convergence of Filters, World Scientific. URL: <https://www.worldscientific.com/worldscibooks/10.1142/12154#t=aboutBook>. DOI: <https://doi.org/10.1142/12154>. Réf. HAL: [hal-04425478](https://hal.archives-ouvertes.fr/hal-04425478)
5. Jaramillo José Luis, Lam Vincent (2024). Asymptotic Reasoning and Universality in (Space)Time Dynamics, Time and Timelessness in Fundamental Physics and Cosmology, Cham, Springer Nature Switzerland, 216:145-167. URL: https://link.springer.com/chapter/10.1007/978-3-031-61860-4_8. DOI: https://doi.org/10.1007/978-3-031-61860-4_8. Réf. HAL: [hal-04841303](https://hal.archives-ouvertes.fr/hal-04841303)
6. Klein Christian, Stoilov Nikola (2024). Numerical Methods for Fractional PDEs, Fractional Dispersive Models and Applications, Cham, Springer Nature Switzerland, 37:187-208. URL: https://link.springer.com/chapter/10.1007/978-3-031-54978-6_6. DOI: https://doi.org/10.1007/978-3-031-54978-6_6. Réf. HAL: [hal-04832826](https://hal.archives-ouvertes.fr/hal-04832826)

Communications, actes de colloques

1. Bakir Toufik, Bonnard Bernard, Boualam Ilias, Abdiche Mokrane (2024). Control and Estimation for the Design of a Smart Electrostimulator using Ding et al. Model, FGS 2024 - French-German-Spanish Conference on Optimization, 18-22 juin 2024, Gijon (Espagne). url: <https://www.unioviado.es/fgs2024/>. Réf. HAL: [hal-04598660](https://hal.archives-ouvertes.fr/hal-04598660) - [OA HAL](https://oahal.archives-ouvertes.fr/hal-04598660)
2. Bourredjem Abderrahmane, Cardot Hervé, Devilliers Hervé (2024). CO7.3 - Intervalle de confiance asymptotique et formules de taille d'échantillon pour l'Intra-classe de concordance à deux voies dans les études de fiabilité inter-juge, 18ème conférence francophone d'Épidémiologie CLINIQUE (EPICLIN), 15-17 mai 2024, Dijon (France). Journal of Epidemiology and Population Health, 72(2):202422. URL: <https://epiclin2024.congres->

[scientifique.com/registration/fr/accueil/o](https://www.sciencedirect.com/science/article/pii/S2950433324003045). DOI: <https://doi.org/10.1016/j.jep.2024.202422>.
Réf. HAL: [hal-04852009](https://hal.archives-ouvertes.fr/hal-04852009)

3. Bourredjem Abderrahmane, Fournel Isabelle, El Saadi N. (2024). P54 - Transformation de stabilisation de la variance pour l'intra-classe de concordance à deux voies et exemple d'application à une méta-analyse d'études de fiabilité inter-juge, *18ème conférence francophone d'Épidémiologie CLINique (EPICLIN)*, 15-17 mai 2024, Dijon (France). 72 202494. URL: <https://www.sciencedirect.com/science/article/pii/S2950433324003045>. DOI: <https://doi.org/10.1016/j.jep.2024.202494>. Réf. HAL: [hal-04852053](https://hal.archives-ouvertes.fr/hal-04852053)

4. Combot Thierry, Sanabria Camilo (2024). Liouvillian Solutions of Third Order Differential Equations, *ISSAC '24: International Symposium on Symbolic and Algebraic Computation*, 16-19 juillet 2024, Raleigh NC USA (États-Unis). *ISSAC '24: Proceedings of the 2024 International Symposium on Symbolic and Algebraic Computation*, 342-350. URL: <https://dl.acm.org/doi/10.1145/3666000.3669707>. DOI: <https://doi.org/10.1145/3666000.3669707>. Réf. HAL: [hal-04829148](https://hal.archives-ouvertes.fr/hal-04829148) - [OA hors HAL](#)

5. Dupuis Xavier, Tardivel Patrick (2024). The Solution Path of SLOPE, *The 27th International Conference on Artificial Intelligence and Statistics (AISTATS 2024)*. MLResearch Press, 238, 775-783. Réf. HAL: [hal-04100441](https://hal.archives-ouvertes.fr/hal-04100441) - [OA HAL](#)

6. Massuyeau Gwénaél (2024). Surgery equivalence relations for 3-manifolds. *Winter Braids Lecture Notes*, 8:1-41. DOI: <https://doi.org/10.5802/wbln.38>. Réf. HAL: [hal-03965596](https://hal.archives-ouvertes.fr/hal-03965596) - [OA hors HAL](#)

7. Peltier Caroline, Visalli Michel, Schlich Pascal, Cardot Hervé (2024). Categorical Functional Data Analysis applied to Temporal Dominance of Sensations data, *Food and Drug Administration (FDA) workshop*, 14-15 mars 2024, Lille (France). URL: <https://fda-lille.sciencesconf.org/?lang=en>. Réf. HAL: [hal-04690542](https://hal.archives-ouvertes.fr/hal-04690542) - [OA HAL](#)

Communications par affiches, posters

1. Bourredjem Abderrahmane, Fournel Isabelle, El Saadi N. (2024). P54 - Transformation de stabilisation de la variance pour l'intra-classe de concordance à deux voies et exemple d'application à une méta-analyse d'études de fiabilité inter-juge, *18ème conférence francophone d'Épidémiologie CLINique (EPICLIN)*, 15-17 mai 2024, Dijon (France). 72 202494. URL: <https://www.sciencedirect.com/science/article/pii/S2950433324003045>. DOI: <https://doi.org/10.1016/j.jep.2024.202494>. Réf. HAL: [hal-04852053](https://hal.archives-ouvertes.fr/hal-04852053)

2. Tardivel Patrick (2024). La loi normale : la reine de l'aléatoire. *Rallyes des collèges et lycées de Bourgogne*, Juin 2024, Dijon, France. Réf HAL : [hal-04722799](https://hal.archives-ouvertes.fr/hal-04722799)

Autres publications

1. Benzoni-Gavage Sylvie, Coulon Rémi (2024). Le dessous des cartes du rulpidon. *Pour la science*. URL: <https://www.pourlascience.fr/sd/mathematiques/le-dessous-des-cartes-du-rulpidon-26238.php>. Réf. HAL: [hal-04797831](https://hal.archives-ouvertes.fr/hal-04797831)
2. Coulon Rémi, Dorfsman-Hopkins Gabriel, Harriss Edmund, Skrodzki Martin, Stange Katherine, Whitney Glen (2024). On the importance of illustration for mathematical research. *Notices of the American Mathematical Society*, 71(01):105-115. URL: https://www.ams.org/cgi-bin/notices/nxgnotices.pl?fm=ful&cnt=ful¤t_year=2024. DOI: <https://doi.org/10.1090/noti2839>. Réf. HAL: [hal-04235296](https://hal.archives-ouvertes.fr/hal-04235296) - OA hors HAL
3. Le Ferrand Hervé (2024). Un enfant de Dompierre-sous-Sanvignes Le sismologue Fernand de Montessus de Ballore (1851-1923). *Echos du passé*, (137). URL: <http://cths.fr/an/societe.php?id=1799>. Réf. HAL: [hal-04607346](https://hal.archives-ouvertes.fr/hal-04607346)
4. Le Ferrand Hervé (2024). 1875 : Décès de Claude Louis Mathieu, astronome. *Célébrations de Bourgogne*, 2024. URL : <https://www.academie-sabl-dijon.org/les-celebrations-de-bourgogne/>. Réf HAL : [hal-04928282v1](https://hal.archives-ouvertes.fr/hal-04928282v1)

Responsabilités éditoriales

Direction de journal :

Dito Giuseppe (éditeur en chef) : *Letters in Mathematical Physics*, Springer-Nature.

Direction de collections et de séries :

Dito Giuseppe : *Mathematical Physics Studies*, Springer-Nature.

Dito Giuseppe (éditeur en chef) : *Progress in Mathematical Physics*, Birkhauser.

Participation à des comités éditoriaux :

Bonnard Bernard : *Pacific Journal of Mathematics for Industry*, Springer-Nature.

Cardot Hervé : *Statistics and Probability Letters*, Elsevier.

Chambrion Thomas : *Journal of Dynamical and Control Systems*, Springer-Nature.

Dreyfus Thomas : *Publications Mathématiques de Besançon*, Laboratoire de Mathématiques de Besançon.

Fairon Maxime : *Journal of Physics A*, IOP Publishing, invité pour le volume spécial : *Dualities*

and Symmetries in Integrable Systems.

Fang Shizan : *Potential Analysis*, Springer-Nature.

Jourani Abderrahim : *Journal of Convex Analysis*, Heldermann Verlag.

Kitanine Nikolai : *Annales Henri Poincaré*, Birkhäuser.

Kitanine Nikolai : *SIGMA Symmetry, Integrability and Geometry : Methods and Applications*, Department of Applied Research, Institute of Mathematics of National Academy of Science of Ukraine.

Klein Christian : *Nonlinearity*, Institute of Physics, London Mathematical Society.

Klein Christian : *Studies in Applied Mathematics*, Wiley-Blackwell.

Mardešić Pavao : *Glasnik Matematički*, Croatian Mathematical Society and Department of Mathematics, Zagreb, Croatia.

Mardešić Pavao : *Qualitative Theory of Dynamical Systems*, Birkhäuser.

Mardešić Pavao : *Extracta Mathematicae*, Universidad de Extremadura.

Moser-Jauslin Lucy : *Publications Mathématiques de Besançon*, Laboratoire de Mathématiques de Besançon.

Semenov-Tian-Shansky Michel : *Letters in Mathematical Physics*, Springer-Nature

Semenov-Tian-Shansky Michel : *Functional Analysis and its Applications*, Springer-Nature.

Semenov-Tian-Shansky Michel : *St Petersburg Mathematical Journal*, American Mathematical Society.

Sjöstrand Johannes : *Journal of Pseudo-differential Operators and Applications*, Birkhäuser.

Sternheimer Daniel : *Reports on Mathematical Physics*, Elsevier.

Sternheimer Daniel : *Letters in Mathematical Physics*, Springer-Nature.

HDR

1. Bertolim Maria Alice (2024). Methods related to dynamical systems. Université de Bourgogne. Réf. HAL: [tel-04618551](#) - [OA HAL](#)

2. Tardivel Patrick (2024). Étude de l'estimateur SLOPE par le prisme du schéma : Propriétés de parcimonie et d'appariement et calcul du chemin des solutions. Université de Bourgogne. Réf. HAL: [hal-04528428](#) - [OA HAL](#)

Thèses

1. Gutierrez Guillen Gabriela. Qualitative study of physical phenomena through geometry of complex foliations. Directeur : Pavao Mardešić. Université Bourgogne Franche-Comté, 2024. NNT: [2024UBFCK012](#). Réf. HAL: [tel-04600862](#) - [OA HAL](#)

2. Huang Hao. Design of numerical methods for non-smooth dynamics. Directeur : Franz Chouly. Université Bourgogne Franche-Comté, 2024. NNT: [2024UBFCK064](#). Réf HAL : [tel-04926914v1](#)

Thèses co-encadrées par des membres de l'IMB dans d'autres laboratoires

1. Carrel Tristan. Étude du spectre infrarouge du Skydrol et analyse topologique de données. Directeur : Samuel Boissière, co-directeurs : Pierre-Yves Louis, Christian Richard. Université de Poitiers, 2024, thèse CIFRE.