



Research in Paris archives

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2023

- Tamagawa motives in automorphic cohomology // J. van Order, S. Bloch
- Combinatorics of the amplituhedron // M. Parisi, M. Sherman-Bennett, L. Williams
- Integral dilations of the fractional part // M. Balazard, B. Martin
- Combinatorics of the ASEP and orthogonal polynomials // S. Corteel, O. Mandelshtam, L. Williams
- Bayesian nonparametric regression model with on-sided errors // N. Bochkina, C. Scricciolo, J. Rousseau
- Average rank of CM elliptic curves over family of twists // C. David, L. Devin, E. Waxman
- The hot spots conjecture // C. Judge, S. Mondal
- Semilinear and quasilinear systems in fluid mechanics forced by space time white noise // Z. Brzezniak, P. Razafimandimby, K. Yamazaki
- Metastate for Long-range Ising models // A. le Ny, E. Ossami Endo, A. van Enter
- Generic Nilpotent Groups // C. d'Elbée, I. Müller, N. Ramsey, D. Siniora
- Maximality of Hilbert schemes of points // V. Kharlamov, R. Rasdeaconu
- Qualitative properties of stochastic equations and their applications // M. Foodun, E. Nualart, E. Locherbach, V. Bally
- Mirror symmetry for hyperpolygons // S. Rayan, E. Macri, L. Schaposnik
- Global dynamics in applied differential delay models // A. Ivanov, M. Adimy, F. Crauste
- Dynamics and geometry on convex real projective manifolds // I. Kim, P. Foulon

2022

- Existential theories of valued fields and their Turing degrees // A. Fehm, S. Anscombe
- Regularity of optimal transport maps for L_p costs // M. Goldman, L. Koch, F. Otto
- Modelling brain activity // C. Antonopoulos, T. Manos
- Singular metrics, valuations and singularities of the MMP // A. Belotto Da Silva, L. Fantini, A. Pichon
- The Baum-Connes conjecture and the mapping class groups // S. Pooya, I.L. Chatterji, M.P. Gomez Aparicio
- M-theory/heterotic duality in the presence of G-flux // I. Melnikov, R. Minasian
- Torsion points on fibres of elliptic surfaces as intersection of multiple sections // J. Desjardins, J. Park, R. Winter
- Low-Lying zeros in families of holomorphic cusp forms // L. Devin, D. Fiorilli, A. Södergren
- Complexity in quantum field theory and holography // S. Chapman, A. L. Cotrone, G. Policastro, D. Seminara, E. Ton
- Structures finslériennes de l'espace de Teichmüller et géométrie convexe // A. Papadopoulos, Y. Huang, H. Miyachi, K. Ohshika

2021

- Théorie ergodique et feuilletages singuliers // B. Deroin, C. Dupont, V. Kleptsyn
- Satellite: 40 years of lambda calculus research // H. Barendregt, G. Manzonetto
- Graded geometry and numerical methods 2.0 // V. Salnikov, C. Laurent-Gengoux, A. Kotov, L. Ryvkin

2020

- Exponential motives // J. Fresán, P. Jossen
- Computability-theoretic aspects of thin set theorem // P. Cholak, L. Patey
- The hunt for fano varieties of K3 type // E. Fatighenti, F. Tanturri
- DN equations: fibered periods and multiplication kernels // S. Bloch, V. Golyshev, V. Roubtsov
- Variational formulation of the inelastic Boltzmann equation // A. Esposito, R. Gvalani, A. Schlichting, M. Schmidtchen

2019

- Attractors for partially dissipative nonlinear coupled systems with continuum of equilibria// F. Alabau-Boussouira, A. Jendoubi
- Diffusions en dimension infinie// A. Bufetov, Y. Kawamoto
- The integrality conjecture in categorified Donaldson-Thomas theory// B. Davison, S. Meinhardt
- Bayesian Wasserstein deconvolution// C. Scricciolo, J. Rousseau, V. Rivoirard
- Bilevel optimisation for optimal non-standard noise modelling in images// L. Calatroni, J.C. De Los Reyes, A. Martin, F. Sciacchitano
- Triangulations of curves and wild monodromy// L. Fantini, D. Turchetti
- Quantum black holes and mock modular forms// S. Alexandrov, J. Manschot
- Mirroring Towers: Calabi-Yau Fibrations and Feynman Integrals// C. Doran, M. Kerr, A. Novoseltsev, P. Vanhove
- Arithmetic of abelian varieties// V. Cantoral Farfán , Y.Tang
- Variation of singularity in CMAE and Kahler geometry// T.Darvas, E. Di Nezza, C.H. Lu
- Singularities of the Kähler-Ricci flow// A. Deruel, R. Conlon
- The Hilbert property// F. Balestrieri, V. Karemaker
- Quantum Hurwitz numbers and q-normalized characters// M.A. Hahn, J. Wahl
- Gauged supergravity black holes and their CFT duals// P.B. Genolini, C. Toldo
- Sub-Riemannian spectral inequalities// V. Franceschi, E. Vecchi

2018

- Fully homomorphic encryption schemes using rings// J-C Faugère, K. Horan, D. Kahrobaei, L. Perret.
- Secondary invariants in mirror symmetry// Eriksson, G. Freixas, C. Mourougane
- Dynamics of smooth R_k -actions on manifolds// Alvarez, B. Santiago
- Space-Variant anisotropic regularization for image restoration//L. Calatroni, A. Lanza
- Group theory//I. Capdeboscq, B. Rémy
- Galois groups of differential equations//P. H. Hai, J. P. Dos Santos
- Analysis of symmetry breaking operators for branching problems//T. Kobayashi, M. Pevzner
- Structural sparsity//P. Ossona de Mendez, J. Nešetřil, F. Reidl, S. Siebertz, B. D. Sullivan
- Dynamique des processus ponctuels//A. Bufetov, Y. Qiu
- The nonlinear evolution equations//T. Duyckaerts, S. Roudenko
- Critical height, moduli height, resultant height//T. Gauthier, P. Ingram, K. Jacobs, H. Krieger
- Eigenfunctions of conjugated Schrödinger operators//B. Mityagin, P. Siegl, J. Viola
- Generalized Geometry for String Theory Compactifications Holography//D. Cassani, M. Petrini
- Renormalization group flows on impurities and supersymmetric Wilson loops//M. Jarvinen, C. Bachas, C. Hoyos, S. Prem Kumar, A. O'Bannon
- Sub-Riemannian soap bubbles//V. Franceschi, G. Stefani

2017

- Theoretical and numerical studies on the multi-scale dynamics of chemotactic bacteria.// S. Yasuda, B. Perthame, L. Almeida, N. Vauchelet, V. Calvez.
- L'effet tunnel magnétique.// V. Bonnaillie-Noël, F. Hérau, N. Raymond
- Flots de Cherry et échanges d'intervalles généralisés.// L. Palmisano, L. Marchese
- Hodge bundles and Arakelov–Milnor inequalities.//O. Biquard, B. Collier, O. Garcia-Prada, D. Toledo
- Mathematical general relativity.//P. LeFloch, J. Olivier
- Lusztig's q-analogue of weight multiplicity: algebra, combinatorics, an geometry.//C. Lecouvrey, C.Lenart
- Uniformly distributed measures in higher codimension. //P.Laurain, M. Petrache
- Cluster algebras.//M. Gekhtman, M. Shapiro, A. Vainshtein
- The Eisenstein cocycle and applications to special values of classical and p-Adic Hecke L-Functions.//P. Charollois, S. Dasgupta, M. Spiess
- Dynamics of the horocycle flow for hyperbolic surface laminations.//F. Alcalde, F. Dal'Bo, M. Martinez, A. Verjovsky
- Hydrodynamic limits from the Boltzmann equation with incoming data.//N. Jiang, F. Golse

2016

- TCompactification via les courbes champêtres de la variété de picard.// A. Chiodo, M. Pacini, E. Esteves
- Homogenization of Maxwell's equations in heterogeneous dispersive dielectrics.// T. Banks, V. Bokil, D. Cioranescu, G. Griso
- The asymptotic behavior of Castelnuovo-Mumford regularity of powers of ideals.// M. Chardin, H. Tài Hà, Ngô Việt Trung.
- Serre conjectures and the mod p Langlands program for unitary groups. //S. Mora, B. Levin, V. B. Le Hung et D. Le.
- K-stability and moduli. //R. Laza et Y. Odaka.
- Dimension reduction in shape formation. //M. Lewicka, A. Raoult.
- Steadily propagating dissolution fingers. //A. Ladd, Y. Pomeau, J. Piasecki et P. Szymczak
- Asymptotics of scalar waves on Lorentzian scattering manifolds and Semiclassical estimates for exterior impedance problems. //D. Baskin, J. Wunsch.
- The next-order term in the Hohenberg-Kohn functional. //C. Cotar, M. Petrache

2015

- A santalo formula for hamiltonian systems and applications. //D. Prandi, L. Rizzi et M. Seri.
- AGT in Minimal Conformal Field Theories and in Integrable Statistical Mechanics. //V. Belavin, B. Estienne, O. Foda, R. Santachiara.
- Classification Bilipschitz des germes de morphismes analytiques complexes //T. Gaffney, W. Neumann, A. Pichon et B. Teissier.
- Quantum entanglement and holography //U. Gursoy, F. Nitti, A. Parnachev et G. Policastro + students
- Gorenstein homological algebra over schemes //S. Estrada, J. Gillespie
- Infinite dimensional geometry and the quantum theory of the gravitational field //C. Brouder, F. Hélein.
- Investigation of nonlocal geometric évolutions //M. Morini, M. Ponsiglione.
- Harmonic analysis and partial differential equations on uniformly rectifiable sets //S. Hofmann, J.-M. Martell, S. Mayboroda, X. Tolsa, A. Volberg.
- AGT in Minimal Conformal Field Theories and in Integrable Statistical Mechanics // V. Belavin, B. Estienne, O. Foda, R. Santachiara.
- Model theory and F1-geometry //J. A. Cruz Morales, B. Zilber

2014

- A Carleman based algorithm to solve inverse problems for waves // L. Baudouin, M. Buhan, S. Ervedoza
- Mathematical analysis of defects in liquid crystals // R. Ignat, L. Nguyen, V. Slustikov, A. Zarnescu
- Verlinde sheaves and tautological classes on moduli spaces // A. Marian, D. Oprea
- Mixing and convergence in Markov models // S. Anulova, A. Guillin, A. Kulik, A. Veretennikov
- Ricci-flat Kähler metrics on complex surfaces //B. Santoro, I. Suvaina
- A Carleman based algorithm to solve inverse problems for waves // L. Baudouin, M. Buhan, S. Ervedoza
- Onsager's Conjecture for the Euler Equations on Manifolds // P. Isett, S. Oh
- Quantum Loop Algebras and Elliptic Quantum Groups // S. Gautam, V. Toledano Laredo
- The Median Class and Property (T) //I. Chatterji, T. Fernós
- AGT conjecture on ale spaces by means of framed sheaves //M. Pedrini, F. Sala

2013

- Chaos in galaxies : bridging the time-dependent analytical models and N-body simulations // T. Manos, R. Machado
- Curvature in sub-riemannian geometry and application // D. Barilari, L. Rizzi
- Noncommutative triangulated surfaces, grassmannians, and cluster algebras // A. Berenstein, V. Retakh
- Identification of time-dependent coefficients in linear parabolic equations // R. Guglielmi, G. Mola
- Von Neumann Algebras : II₁ factor // S. Popa, S. Vaes
- Complexity in symbolic dynamics // Van Cyr, B. Kra
- Non-equilibrium statistical mechanics // J. Lebowitz and colleagues
- Stochastic Navier-Stokes Equations and connections to Turbulence // N. Glatt-Holtz, V. Vicol
- Forcing Axioms at the successor of a singular cardinal // J. Cummings, M. Džamonja, C. Morgan

2012

- The further development of the theory of C*-algebra extensions // V. Manuilov and K. Thomsen
- Théorie des modèles et corps valués ordonnés // S. Kuhlmann, M. Matusinski, F. Point
- Pentagram map, cluster algebras and frieze patterns // V. Ovsienko, S. Tabachnikov
- The Weak Lefschetz property for codimension four complete intersections // M. Boij, J. Migliore, R. Miro-Roig, U. Nagel
- Théorie effective de l'aléatoire pour les mesures non-uniformes // L. Bienvenu, T. Slaman, K. Allen, G. Lafitte
- Alexandrov Geometry // S. Alexander, V. Kapovitch, A. Petrunin
- Algebraic theory of integrable systems of Hamiltonian PDE // V. Kac, A. De Sole
- Mathematical analysis of macroscopic effects in biosystems // G. Berman, F. Borgonovi et M. Merkli
- Integrability in Gauge and String Theories // O. Foda, I. Kostov, D. Serban, M. Wheeler

2011

- Spectrum of linear elliptic operators and applications // A. Ramm et V. Volpert
- Derivation of fluid models from the Boltzmann equation : Ghost effect by curvature // R. Mara, A. Nouri, R. Esposito and L. Arkeryd



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- Saturday from 10am to 6pm,
- closed on Wednesday and Sunday.