

Sommaire / Contents

tome 351, janvier–décembre 2013

Logique/Logic

- $\{-1\}$ -self dual finite prechains and applications, **Houcine Bouchaala, Youssef Boudabbous, Gérard Lopez** 859

Combinatoire/Combinatorics

- Strict unimodality of q -binomial coefficients, **Igor Pak, Greta Panova** 415
- The indecomposable tournaments T with $|W_5(T)| = |T| - 2$, **Houmem Belkhechine, Imed Boudabbous, Kaouthar Hzami** 501
- A note on the r -Whitney numbers of Dowling lattices, **Mircea Merca** 649
- $\{-1\}$ -self dual finite prechains and applications, **Houcine Bouchaala, Youssef Boudabbous, Gérard Lopez** 859

Théorie des nombres/Number Theory

- On the prime divisors of the number of points on an elliptic curve, **Chris Hall, Antonella Perucca** 1
- An algorithm computing non-solvable spectral radii of p -adic differential equations, **Andrea Pulita** 167
- Dérivée en $s = 1$ de la fonction L p -adique du carré symétrique d'une courbe elliptique sur un corps totalement réel, **Giovanni Rosso** 251
- On a theorem of Kisin, **Alexander Beilinson, Floric Tavares Ribeiro** 505
- A note on the r -Whitney numbers of Dowling lattices, **Mircea Merca** 649
- Uniform lower bound for the least common multiple of a polynomial sequence, **Shaofang Hong, Yuanyuan Luo, Guoyou Qian, Chunlin Wang** 781

Algèbre/Algebra

- Some remarks on non-commutative principal ideal rings, **Sylvain Carpentier, Alberto De Sole, Victor G. Kac** 5
- Note on the completion of a local domain with geometrically normal formal fibers, **Charef Beddani** 173

- Coxeter-like groups for set-theoretic solutions of the Yang–Baxter equation, **Patrick Dehornoy** 419
- Division of the Dickson algebra by the Steinberg unstable module, **Nguyen Dang Ho Hai** 425
- Generating regular elements, **J.T. Stafford** 429
- Relations of Keune symbols, **Ziqiang Fan, Guangtian Song, Yuzhen Peng** 865

Algèbre homologique/Homological Algebra

- L'anneau de cohomologie des variétés de Seifert, **Anne Bauval, Claude Hayat** 81

Théorie des groupes/Group Theory

- Semisimple Lie groups satisfy property RD, a short proof, **Adrien Boyer** 335
- L^2 -Betti numbers of locally compact groups, **Henrik Densing Petersen** 339
- Explicit left orders on free groups extending the lexicographic order on free monoids, **Zoran Šunić** 507
- Locally normal subgroups of simple locally compact groups, **Pierre-Emmanuel Caprace, Colin D. Reid, George A. Willis** 657
- A remark on homomorphisms from right-angled Artin groups to mapping class groups, **Javier Aramayona, Juan Souto** 713
- The Lie algebra of type G_2 is rational over its quotient by the adjoint action, **Dave Anderson, Mathieu Florence, Zinovy Reichstein** 871

Algèbres de Lie/Lie Algebras

- Bach-flat Lie groups in dimension 4, **Elsa Abbena, Sergio Garbiero, Simon Salamon** 303

Analyse mathématique/Mathematical Analysis

- New asymptotic expansions related to Somos' quadratic recurrence constant, **Chao-Ping Chen** 9
- Lower bounds for operators on graded Lie groups, **Véronique Fischer, Michael Ruzhansky** 13
- Assouad dimensions of Moran sets, **Jinjun Li** 19

• On a criterion for continuity and compactness of composition operators acting on α -Bloch spaces, María T. Malavé Ramírez, Julio C. Ramos Fernández	23	• Global regularity and L^p -estimates for $\bar{\partial}$ on an annulus between two strictly pseudoconvex domains in a Stein manifold, Shaban Khidr, Osama Abdelkader	883
• A global attractor for a $p(x)$ -Laplacian inclusion, Jacson Simsen	87	Équations différentielles/Ordinary Differential Equations	
• A Beurling type theorem in weighted Bergman spaces, Joseph A. Ball, Vladimir Bolotnikov	433	• Lyapunov exponent of a stochastic SIRS model, Guoting Chen, Tiecheng Li, Changjian Liu	33
• Spectral properties of Schrödinger operators on compact manifolds: Rigidity, flows, interpolation and spectral estimates, Jean Dolbeault, Maria J. Esteban, Ari Laptev, Michael Loss	437	• Eigenvalues and eigenvectors assignment for neutral type systems, Katerina Sklyar, Rabah Rabah, Grigory Sklyar	91
• On the differentiable vectors for contragredient representations, Ingrid Beltita, Daniel Beltita	513	Équations aux dérivées partielles/Partial Differential Equations	
• On the asymptotics of a Robin eigenvalue problem, Fioralba Cakoni, Nicolas Chaulet, Housseem Haddar	517	• Multiple symmetric solutions for a Neumann problem with lack of compactness, Giovanni Molica Bisci, Vi-centiu Rădulescu	37
• A certain weighted variant of the embedding inequalities, Stanislav Kračmar, Šárka Nečasová, Patrick Penel	663	• Un résultat de compacité sur la densité dans les équations de Navier–Stokes compressibles en domaine variable, Pierre Orenga, Anne Tomasi	43
• Ruelle operators and decay of correlations for contact Anosov flows, Luchezar Stoyanov	669	• Error estimate for a 1D–2D finite volume scheme. Comparison with a standard scheme on a 2D non-admissible mesh, Marie-Claude Viallon	47
• A posteriori error majorants of the modeling errors for elliptic homogenization problems, Sergey I. Repin, Tatiana S. Samrowski, Stefan A. Sauter	877	• An explicit counterexample for the L^p -maximal regularity problem, Stephan Fackler	53
Théorie du potentiel/Potential Theory		• A global attractor for a $p(x)$ -Laplacian inclusion, Jacson Simsen	87
• On the behaviour of power series in the absence of Hadamard–Ostrowski gaps, Thomas Kalmes, Jürgen Müller, Markus Nieß	255	• A Carleman estimate for the two dimensional heat equation with mixed boundary conditions, Tarik Ali Ziane, Hadjer Ouzzane, Ouahiba Zair	97
Analyse complexe/Complex Analysis		• A mathematical model of mast cell response to acupuncture needling, Yannick Deleuze	101
• Squares of positive (p, p) -forms, Zbigniew Błocki, Szymon Plíš	27	• A remark on Lipschitz stability for inverse problems, Laurent Bourgeois	187
• Tauberian-type theorem for (e) -convergent sequences, Mubariz T. Karaev	177	• Problème inverse pour une équation parabolique à coefficients périodiques non réguliers, Isma Kaddouri, Djamel Eddine Teniou	191
• Some preserving sandwich results of certain integral operators on multivalent meromorphic functions, Tamer M. Seoudy	181	• Solving generalized eigenvalue problems on the interfaces to build a robust two-level FETI method, Nicole Spillane, Victorita Dolean, Patrice Hauret, Frédéric Nataf, Daniel J. Rixen	197
• On the behaviour of power series in the absence of Hadamard–Ostrowski gaps, Thomas Kalmes, Jürgen Müller, Markus Nieß	255	• On an extension of a bilinear functional on $L^p(\mathbb{R}^d) \otimes E$ to a Bochner space with an application to velocity averaging, Martin Lazar, Darko Mitrović	261
• Bott–Chern cohomology and q -complete domains, Daniele Angella, Simone Calamai	343	• Approximation grossière d'un problème elliptique à coefficients hautement oscillants, Claude Le Bris, Frédéric Legoll, Kun Li	265
• Coefficient estimates for a class of meromorphic bivalent functions, Samaneh G. Hamidi, Suzeini A. Halim, Jay M. Jahangiri	349	• Méthode des éléments finis multi-échelles pour le problème de Stokes, Alexei Lozinski, Zoubida Mghazli, Khallih Ould Ahmed Ould Blal	271
• Théorème de Poincaré–Alexander pour les domaines modèles, Marianne Peyron	353	• The Goursat problem for the Einstein–Vlasov system: (II) The evolution of initial data, Calvin Tadmon	277
• A comparison principle for the log canonical threshold, Phạm Hoàng Hiệp	441	• Solutions of the Vlasov–Maxwell–Boltzmann system with long-range interactions, Diogo Arsénio, Laure Saint-Raymond	357
• Dérivation relative, Michael McQuillan	523	• A smooth extension method, Benoit Fabrèges, Loïc Gouarin, Bertrand Maury	361
• Weighted-composition operators on \mathcal{N}_p -spaces in the ball, Hu Bingyang, Khoi Le Hai	719		
• Subclasses of p -valent functions of bounded boundary rotation involving the generalized fractional differential operator, Tamer M. Seoudy, Mohamed K. Aouf	787		
• Algebraic approximation of analytic subsets of $\mathbb{C}^q \times \{0\}$ in \mathbb{C}^{q+1} , Marcin Bilski	793		

• Quasilinear elliptic Hamilton–Jacobi equations on complete manifolds, Marie-Françoise Bidaut-Véron, Marta Garcia-Huidobro, Laurent Véron	445	• Espaces de Hardy et compacité par compensation : un résultat en dimension deux, Fabien Flori, Catherine Giacomoni	889
• On the existence of weak solutions to a model problem for the unsteady turbulent pipe-flow, Joachim Naudmann	451	• Local well-posedness of a nonlinear KdV-type equation, Samer Israwi, Raafat Talhouk	895
• On the planning problem for a class of Mean Field Games, Alessio Porretta	457	• Nonlinear reduced basis approximation of parameterized evolution equations via the method of freezing, Mario Ohlberger, Stephan Rave	901
• On the asymptotics of a Robin eigenvalue problem, Fioralba Cakoni, Nicolas Chaulet, Houssein Haddar	517	• Inviscid symmetry breaking with non-increasing energy, Emil Wiedemann	907
• Lipschitz stability estimate in the inverse Robin problem for the Stokes system, Anne-Claire Egloffé	527		
• Stability of the vortex defect in the Landau–de Gennes theory for nematic liquid crystals, Radu Ignat, Luc Nguyen, Valeriy Slastikov, Arghir Zarnescu	533	Analyse harmonique/Harmonic Analysis	
• Uniform analyticity and exponential decay of the semigroup associated with a thermoelastic plate equation with perturbed boundary conditions, Louis Tebou	539	• Lower bounds for operators on graded Lie groups, Véronique Fischer, Michael Ruzhansky	13
• Global existence and boundedness of classical solutions for a chemotaxis model with logistic source, Khadijeh Baghaei, Mahmoud Hesaaraki	585	• Semisimple Lie groups satisfy property RD, a short proof, Adrien Boyer	335
• A combination between the reduced basis method and the ANOVA expansion: On the computation of sensitivity indices, Denis Devaud, Andrea Manzoni, Gianluigi Rozza	593	• Methods of harmonic analysis in nonlinear dynamics, Dmitriy Dmitrishin, Anna Khamitova	367
• Effective stability for slow time-dependent near-integrable Hamiltonians and application, Abed Bounemoura	673	• The John–Nirenberg inequality with sharp constants, Andrei K. Lerner	463
• Explicit 2D ∞ -harmonic maps whose interfaces have junctions and corners, Nicholas Katzourakis	677	• On the differentiable vectors for contragredient representations, Ingrid Beltita, Daniel Beltita	513
• New properties of the Fučík spectrum, Riccardo Molle, Donato Passaseo	681	• Measures with uniformly discrete support and spectrum, Nir Lev, Alexander Olevskii	599
• Spectral stability results for higher-order operators under perturbations of the domain, José M. Arrieta, Pier Domenico Lamberti	725	• Marcinkiewicz r -classes and Fourier series expansions of operator ergodic Stieltjes convolutions, Earl Berkson	813
• Lower bounds for the blow-up time in the higher-dimensional nonlinear divergence form parabolic equations, Khadijeh Baghaei, Mahmoud Hesaaraki	731	• Hypergroupoids and C^* -algebras, Rohit Dilip Holkar, Jean Renault	911
• Semicontinuous viscosity solutions for quasiconvex Hamiltonians, Emmanuel N. Barron	737	Analyse fonctionnelle/Functional Analysis	
• A new relation between the condensation index of complex sequences and the null controllability of parabolic systems, Farid Ammar Khodja, Assia Benabdallah, Manuel González-Burgos, Luz de Teresa	743	• An explicit counterexample for the L^p -maximal regularity problem, Stephan Fackler	53
• Cauchy problems with modified conditions for the Euler–Poisson–Darboux equations in the hyperbolic space, Cheikh Ould Mohamed El-Hafedh, Elbar Ould Ely Telmoudy, Mohamed Vall Ould Moustapha	747	• Tauberian-type theorem for (e) -convergent sequences, Mubariz T. Karaev	177
• Reconstruction of extended sources with small supports in the elliptic equation $\Delta u + \mu u = F$ from a single Cauchy data, Batoul Abdelaziz, Abdellatif El Badia, Ahmad El Hajj	797	• Subnormality of 2-variable weighted shifts with diagonal core, Raúl Enrique Curto, Sang Hoon Lee, Jasang Yoon	203
• Nucleation and backward motion of discrete interfaces, Andrea Braides, Giovanni Scilla	803	• Explicit formulas for the Schrödinger wave operators in \mathbb{R}^2 , Serge Richard, Rafael Tiedra de Aldecoa	209
• Finite time singularity in a free boundary problem modeling MEMS, Joachim Escher, Philippe Laurençot, Christoph Walker	807	• On an extension of a bilinear functional on $L^p(\mathbb{R}^d) \otimes E$ to a Bochner space with an application to velocity averaging, Martin Lazar, Darko Mitrović	261
		• On T. Bartoszyński’s structure theorem for measurable filters, Michel Talagrand	281
		• Inequality between unitary orbits, Mitsuru Uchiyama, Michio Seto	285
		• A Hilbert-type integral inequality with the mixed kernel of multi-parameters, Qiong Liu, Wenbing Sun	605
		• Longitudinal smoothness of the holonomy groupoid, Claire Debord	613
		• A certain weighted variant of the embedding inequalities, Stanislav Kračmar, Šárka Nečasová, Patrick Penel	663
		• Weighted-composition operators on \mathcal{N}_p -spaces in the ball, Hu Bingyang, Khoi Le Hai	719

• Honesty in discrete, nonlocal and randomly position structured fragmentation model with unbounded rates, Emile Franc Doungmo Goufo, Soares Clovis Oukouomi Noutchie	753	• On Cremona transformations of \mathbb{P}^3 with all possible bidegrees, Ivan Pan	467
• Sums of Murray–von Neumann equivalent operators, Jean-Christophe Bourin, Eun-Young Lee	761	• Dérivation relative, Michael McQuillan	523
• Marcinkiewicz r -classes and Fourier series expansions of operator ergodic Stieltjes convolutions, Earl Berkson	813	• Mixed Hodge structures and Weierstrass σ -function, Grzegorz Banaszak, Jan Milewski	551
• Hypergroupoids and C^* -algebras, Rohit Dilip Holkar, Jean Renault	911	• Cubic symmetroids and vector bundles on a quadric surface, Sukmoon Huh	557
Contrôle optimal/Optimal Control		• On natural deformations of symplectic automorphisms of manifolds of $K3^{[m]}$ type, Giovanni Mongardi	561
• Uniform analyticity and exponential decay of the semi-group associated with a thermoelastic plate equation with perturbed boundary conditions, Louis Tebou	539	• Surfaces in \mathbb{P}^4 whose 4-secant lines do not sweep out a hypersurface, José Carlos Sierra	623
• A least-squares formulation for the approximation of null controls for the Stokes system, Arnaud Münch, Pablo Pedregal	545	• Parties polaires et compactification ELSV, Bashar Dudin	695
• Contrôlabilité asymptotique et synchronisation asymptotique d'un système couplé d'équations des ondes avec des contrôles frontières de Dirichlet, Tatsien Li, Bopeng Rao	687	• On a family of complex algebraic surfaces of degree $3n$, Juan García Escudero	699
• Semicontinuous viscosity solutions for quasiconvex Hamiltonians, Emmanuel N. Barron	737	• The Lie algebra of type G_2 is rational over its quotient by the adjoint action, Dave Anderson, Mathieu Florence, Zinovy Reichstein	871
Géométrie/Geometry		Géométrie analytique/Analytic Geometry	
• The L^2 -Alexander invariant detects the unknot, Fathi Ben Aribi	215	• Generalized L^2 extension theorem and a conjecture of Ohsawa, Qi'an Guan, Xiangyu Zhou	111
• Constructibilité de de Rham p -adique, Zoghman Mebkhout	617	• Bott–Chern cohomology and q -complete domains, Daniele Angella, Simone Calamai	343
• Remarks on compact shrinking Ricci solitons of dimension four, Li Ma	817	• Algebraic approximation of analytic subsets of $\mathbb{C}^q \times \{0\}$ in \mathbb{C}^{q+1} , Marcin Bilski	793
• The projective plane, J -holomorphic curves and Desargues' theorem, Siddhartha Gadgil	915	Géométrie différentielle/Differential Geometry	
Géométrie algébrique/Algebraic Geometry		• An entropy formula relating Hamilton's surface entropy and Perelman's \mathcal{W} entropy, Hongxin Guo	115
• Systèmes d'équations polynomiales pour les revêtements hyperelliptiques d -osculants, Armando Treibich	57	• The tetrahedral property and a new Gromov–Hausdorff compactness theorem, Christina Sormani	119
• A remark on the Abel–Jacobi morphism for the cubic threefold, Ze Xu	63	• Théorèmes de type Obata pour certains feuilletages riemanniens, M.A. Chaouch	123
• On the regularity of special difference divisors, Ulrich Terstiege	107	• Curvature properties of anti-Kähler–Codazzi manifolds, Arif Salimov, Sibel Turanli	225
• Note on the completion of a local domain with geometrically normal formal fibers, Charef Beddani	173	• Bach-flat Lie groups in dimension 4, Elsa Abbena, Sergio Garbiero, Simon Salamon	303
• Ulrich bundles on quartic surfaces with Picard number 1, Emre Coskun	221	• Théorème de Poincaré–Alexander pour les domaines modèles, Marianne Peyron	353
• Braids, conformal module and entropy, Burglind Jöricke	289	• Spectral properties of Schrödinger operators on compact manifolds: Rigidity, flows, interpolation and spectral estimates, Jean Dolbeault, Maria J. Esteban, Ari Laptev, Michael Loss	437
• Degree and class of caustics by reflection for a generic source, Alfrederic Josse, Françoise Pène	295	• Quasilinear elliptic Hamilton–Jacobi equations on complete manifolds, Marie-Françoise Bidaut-Véron, Marta Garcia-Huidobro, Laurent Véron	445
• Le groupe de Brauer non ramifié sur un corps global de caractéristique positive, Giancarlo Lucchini Arteche ..	299	• On extrinsic symmetric spaces with zero mean curvature in Minkowski space-time, Jong Ryul Kim	471
• A smooth surface of tame representation type, Daniele Faenzi, Francesco Maspina	371	• Isometric deformations of the $\mathcal{K}^{\frac{1}{4}}$ -flow translators in \mathbb{R}^3 with helicoidal symmetry, Hojoon Lee	477
• Families of curves over \mathbb{P}^1 with 3 singular fibers, Cheng Gong, Xin Lu, Sheng-Li Tan	375	• Longitudinal smoothness of the holonomy groupoid, Claire Debord	613
• Stable bundles as Frobenius morphism direct image, Congjun Liu, Mingshuo Zhou	381	• Immersions biharmoniques dans une variété de Cartan–Hadamard, Saïd Asserda, M'Hamed Kassi	627
		• A Note on hypersurfaces of a Euclidean space, Sharief Deshmukh	631

• Regularity of the Kähler–Ricci flow, Gang Tian, Zhenlei Zhang	635	Probabilités/Probability Theory	
• Sym–Bobenko formula for minimal surfaces in Heisenberg space, Sébastien Cartier	825	• Relations de récurrence à coefficients aléatoires et lois stables, Zhiqiang Gao, Yves Guivarc’h, Émile Le Page .	69
• A note on “Sur le noyau de l’opérateur de courbure d’une variété finslérienne” [C. R. Acad. Sci. Paris, Ser. A 272 (1971) 807–810], Nabil L. Youssef, Salah G. Elgendi	829	• Hardy–Littlewood’s inequalities in the case of a capacity, Miryana Grigorova	73
• A note on Chow’s entropy functional for the Gauss curvature flow, Hongxin Guo, Robert Philipowski, Anton Thalmaier	833	• On the suprema of Bernoulli processes, Witold Bednorz, Rafał Łatała	131
• On an isotropic property of anti–Kähler–Codazzi manifolds, Arif Salimov, Kursat Akbulut, Sibel Turanli	837	• Reducing variance in the numerical solution of BSDEs, Samu Alanko, Marco Avellaneda	135
• A Semple-type approach to a problem of Goursat: The multi-flag case, Alex L. Castro, Wyatt C. Howard	921	• Remark on the finite-dimensional character of certain results of functional statistics, Jean-Marc Azaïs, Jean-Claude Fort	139
• Special projective Lichnérowicz–Obata theorem for Randers spaces, Mehdi Rafie-Rad	927	• Goodness-of-fit test for homogeneous Markov processes, Vilijandas Bagdonavičius, Mikhail Nikulin	149
Topologie/Topology		• Solvability of some quadratic BSDEs without exponential moments, Khaled Bahlali, M’hamed Eddahbi, Youssef Ouknine	229
• L’anneau de cohomologie des variétés de Seifert, Anne Bauval, Claude Hayat	81	• Exponential functional of Lévy processes: Generalized Weierstrass products and Wiener–Hopf factorization, Pierre Patie, Mladen Savov	393
• Almost commensurability of 3-dimensional Anosov flows, Pierre Dehornoy	127	• Cumulant operators and moments of the Itô and Skorohod integrals, Nicolas Privault	397
• The L^2 -Alexander invariant detects the unknot, Fathi Ben Aribi	215	• Corrigendum to “Solvability of some quadratic BSDEs without exponential moments” [C. R. Acad. Sci. Paris, Ser. I 351 (5–6) (2013) 229–233], Khaled Bahlali, M’hamed Eddahbi, Youssef Ouknine	489
• Braids, conformal module and entropy, Burglind Jöricke	289	• Asymptotique des valeurs extrêmes pour les marches aléatoires affines, Yves Guivarc’h, Émile Le Page	703
• Division of the Dickson algebra by the Steinberg unstable module, Nguyen Dang Ho Hai	425	• Tests d’adéquation à la mesure de Haar, identité de duplication de Watson et représentations d’un groupe compact, Jean-Renaud Pycke	765
• On the hit problem for the polynomial algebra, Nguyễn Sum	565	• Weighted moments for the limit of a normalized supercritical Galton–Watson process, Xingang Liang, Quansheng Liu	769
• A remark on homomorphisms from right-angled Artin groups to mapping class groups, Javier Aramayona, Juan Souto	713	• Sharp large deviations under Bernstein’s condition, Xiequan Fan, Ion Grama, Quansheng Liu	845
Topologie différentielle/Differential Topology		Statistique/Statistics	
• A proof of Morse’s theorem about the cancellation of critical points, François Laudenbach	483	• Remark on the finite-dimensional character of certain results of functional statistics, Jean-Marc Azaïs, Jean-Claude Fort	139
• The displaced disks problem via symplectic topology, Sobhan Seyfaddini	841	• Additivity test on the nonlinear part in partially linear models, Khalid Chokri, Djamal Louani	143
• The projective plane, J -holomorphic curves and Desargues’ theorem, Siddhartha Gadgil	915	• Goodness-of-fit test for homogeneous Markov processes, Vilijandas Bagdonavičius, Mikhail Nikulin	149
Systèmes dynamiques/Dynamical Systems		• A new nonlinear formulation for GARCH models, Sebastian Ossandón, Natalia Bahamonde	235
• Almost commensurability of 3-dimensional Anosov flows, Pierre Dehornoy	127	• Sensitivity indices for multivariate outputs, Fabrice Gamboa, Alexandre Janon, Thierry Klein, Agnès Lagnoux	307
• Methods of harmonic analysis in nonlinear dynamics, Dmitriy Dmitrishin, Anna Khamitova	367	• Robustness of dual divergence estimators for models satisfying linear constraints, Aida Toma	311
• Band structure of the Ruelle spectrum of contact Anosov flows, Frédéric Faure, Masato Tsujii	385	• Efficiency of bridging between related dose finding studies, John O’Quigley	401
• Explicit left orders on free groups extending the lexicographic order on free monoids, Zoran Šunić	507	• Propriétés asymptotiques des M-estimateurs pondérés pour des données clusterisées, Mohammed El Asri	491
• Ruelle operators and decay of correlations for contact Anosov flows, Luchezar Stoyanov	669		
• A Semple-type approach to a problem of Goursat: The multi-flag case, Alex L. Castro, Wyatt C. Howard	921		

• Exchangeably weighted bootstraps of empirical estimators of a semi-Markov kernel, Salim Bouzebda, Nikolaos Limnios	569	• A posteriori error majorants of the modeling errors for elliptic homogenization problems, Sergey I. Repin, Tatiana S. Samrowski, Stefan A. Sauter	877
• Comportement asymptotique de l'estimateur non paramétrique de la fonction de renouvellement associée à des variables aléatoires positives indépendantes et non stationnaires, Michel Harel, Fy Mamenosoa Ravelomanantsoa	575	• Nonlinear reduced basis approximation of parameterized evolution equations via the method of freezing, Mario Ohlberger, Stephan Rave	901
• Tests d'adéquation à la mesure de Haar, identité de duplication de Watson et représentations d'un groupe compact, Jean-Renaud Pycke	765	• A posteriori analysis of the Chorin–Temam scheme for Stokes equations, Sébastien Boyaval, Marco Picasso ..	931
• Sharp large deviations under Bernstein's condition, Xiequan Fan, Ion Grama, Quansheng Liu	845	• A model-data weak formulation for simultaneous estimation of state and model bias, Masayuki Yano, James D. Penn, Anthony T. Patera	937
Analyse numérique/Numerical Analysis		Automatique théorique/Automation (theoretical)	
• Error estimate for a 1D–2D finite volume scheme. Comparison with a standard scheme on a 2D non-admissible mesh, Marie-Claude Viallon	47	• Eigenvalues and eigenvectors assignment for neutral type systems, Katerina Sklyar, Rabah Rabah, Grigory Sklyar	91
• Four closely related equilibrated flux reconstructions for nonconforming finite elements, Alexandre Ern, Martin Vohralík	77	• Growth bound of delay-differential algebraic equations, Sébastien Boisgérault	645
• Reducing variance in the numerical solution of BSDEs, Samu Alanko, Marco Avellaneda	135	Physique mathématique/Mathematical Physics	
• On the conservativity of cell-centered Galerkin methods, Daniele A. Di Pietro	155	• Explicit formulas for the Schrödinger wave operators in \mathbb{R}^2 , Serge Richard, Rafael Tiedra de Aldecoa	209
• A fully decoupled scheme for the interaction of a thin-walled structure with an incompressible fluid, Miguel Ángel Fernández, Mikel Landajuela	161	• The Goursat problem for the Einstein–Vlasov system: (II) The evolution of initial data, Calvin Tadmon	277
• Solving generalized eigenvalue problems on the interfaces to build a robust two-level FETI method, Nicole Spillane, Victorita Dolean, Patrice Hauret, Frédéric Nataf, Daniel J. Rixen	197	• Band structure of the Ruelle spectrum of contact Anosov flows, Frédéric Faure, Masato Tsujii	385
• Approximation grossière d'un problème elliptique à coefficients hautement oscillants, Claude Le Bris, Frédéric Legoll, Kun Li	265	Problèmes mathématiques de la mécanique/Mathematical Problems in Mechanics	
• Méthode des éléments finis multi-échelles pour le problème de Stokes, Alexei Lozinski, Zoubida Mghazli, Khallih Ould Ahmed Ould Blal	271	• A fully decoupled scheme for the interaction of a thin-walled structure with an incompressible fluid, Miguel Ángel Fernández, Mikel Landajuela	161
• A smooth extension method, Benoit Fabrèges, Loïc Gouarin, Bertrand Maury	361	• Problèmes capacitaires en viscoplasticité avec effets de torsion, Michel Bellieud	241
• FE heterogeneous multiscale method for long-time wave propagation, Assyr Abdulle, Marcus J. Grote, Christian Stohrer	495	• Unique continuation for first-order systems with integrable coefficients and applications to elasticity and plasticity, Johannes Lankeit, Patrizio Neff, Dirk Pauly	247
• A combination between the reduced basis method and the ANOVA expansion: On the computation of sensitivity indices, Denis Devaud, Andrea Manzoni, Gianluigi Rozza	593	• Une formulation hybride du modèle de coque de Naghdi, Adel Blouza	317
• Construction d'un champ continu de métriques, Patrick Laug, Houman Borouchaki	639	• Expression of Dirichlet boundary conditions in terms of the Cauchy–Green tensor field, Philippe G. Ciarlet, Cristinel Mardare	323
• L^2 stability of nonlinear finite-volume schemes for linear hyperbolic systems, Michaël Ndjinga	707	• Expression of Dirichlet boundary conditions in terms of the strain tensor in linearized elasticity, Philippe Ciarlet, Cristinel Mardare	329
• Cauchy problems with modified conditions for the Euler–Poisson–Darboux equations in the hyperbolic space, Cheikh Ould Mohamed El-Hafedh, Elbar Ould Ely Telmoudy, Mohamed Vall Ould Moustapha	747	• Nonlinear Donati compatibility conditions for the nonlinear Kirchhoff–von Kármán–Love plate theory, Philippe G. Ciarlet, Giuseppe Geymonat, Françoise Krasucki	405
• Approximation by Müntz spaces on positive intervals, Rachid Ait-Haddou, Marie-Laurence Mazure	849	• The motion of a solid with large deformations, Elena Bonetti, Pierluigi Colli, Michel Frémond	579
		• Un modèle ES–BGK pour des mélanges de gaz, Stéphane Brull	775
		• Reconstruction of extended sources with small supports in the elliptic equation $\Delta u + \mu u = F$ from a single Cauchy data, Batoul Abdelaziz, Abdellatif El Badia, Ahmad El Hajj	797

• Green's formulas with little regularity on a surface – Application to Donati-like compatibility conditions on a surface, Philippe G. Ciarlet, Oana Iosifescu	853	• A least-squares formulation for the approximation of null controls for the Stokes system, Arnaud Münch, Pablo Pedregal	545
• Inviscid symmetry breaking with non-increasing energy, Emil Wiedemann	907	• Spectral stability results for higher-order operators under perturbations of the domain, José M. Arrieta, Pier Domenico Lamberti	725
• The space $\mathbf{H}(\text{div}, \cdot)$ on a surface – Application to Donati-like compatibility conditions on a surface, Philippe G. Ciarlet, Oana Iosifescu	943	• Nucleation and backward motion of discrete interfaces, Andrea Braides, Giovanni Scilla	803
Calcul des variations/Calculus of Variations		Économie mathématique/Mathematical Economics	
• Stability of the vortex defect in the Landau–de Gennes theory for nematic liquid crystals, Radu Ignat, Luc Nguyen, Valeriy Slastikov, Arghir Zarnescu	533	• A new nonlinear formulation for GARCH models, Sebastian Ossandón, Natalia Bahamonde	235
		• Option price with stochastic volatility for both fast and slow mean-reverting regimes, Qiang Zhang, Jiguang Han, Ming Gao	411