

2018

**Sinesio Pesco, Viviana Lorena Vargas**, Vector Field-based Simulation of Tree-Like Non-Stationary Geostatistical Models, [Arxiv.org](#)

**Silvius Klein, Pedro Duarte, Manuel Santos**, A random cocycle with non Hölder Lyapunov exponent, [Arxiv.org](#)

**Silvius Klein, Pedro Duarte**, Large deviations for products of random two dimensional matrices, [Arxiv.org](#)

**Ricardo Alonso, Yoshinori Morimoto, Weiran Sun, Tong Yang**, Non-Cutoff Boltzmann Equation with Polynomial Decay Perturbation, [Arxiv.org](#)

**Rafael O. Ruggiero, Artur O. Lopes**, The infinite dimensional manifold of Hölder equilibrium probabilities has non-negative curvature, [Arxiv.org](#)

**Nicolau Saldanha, Victor Goulart**, Combinatorialization of spaces of nondegenerate spherical curves, [Arxiv.org](#)

**Sinesio Pesco, Orlando Fonseca Guilarte, Simone Diniz Junqueira Barbosa**, Simplified Graph-based Visualization for Scientific Publication, [Arxiv.org](#)

**Alessandro Alla, Luca Saluzzi, Maurizio Falcone**, Error estimates for a tree structure algorithm solving finite horizon control problems, [Arxiv.org](#)

**Alessandro Alla, Andreas Schmidt, Bernard Haasdonk**, Feedback control of parametrized PDEs via model order reduction and dynamic programming principle, [Arxiv.org](#)

**Alessandro Alla, Luca Saluzzi, Maurizio Falcone**, An efficient DP algorithm on a tree-structure for finite horizon optimal control problems, [Arxiv.org](#)

**Alessandro Alla, Annalisa Quaini, Gianluigi Rozza, Martin Hess, Max Gunzburger**, A Localized Reduced-Order Modeling Approach for PDEs with Bifurcating Solutions, [Arxiv.org](#)

**Alessandro Alla, Brunton, J. Nathan Kutz, Samuel Rudy, Steven L.**, Data-driven identification of parametric partial differential equations, [Arxiv.org](#)

**Marcos Craizer, Ronaldo Alves Garcia**, Centroaffine Duality and Loewner's type Conjectures, [Arxiv.org](#)

**Marcos Craizer, Sinesio Pesco**, Centroaffine Duality for Spatial Polygons, [Arxiv.org](#)

**Edgard A. Pimentel**, Regularity theory for the Isaacs equation through approximation methods, [Arxiv.org](#)

**Edgard A. Pimentel, Anne Bronzi, Eduardo V. Teixeira, Giane C. Rampasso**, Regularity of solutions to a class of variable-exponent fully nonlinear elliptic equations, [Arxiv.org](#)

**Lorenzo J. Díaz, Christian Bonatti, Dominik Kwietniak**, Robust existence of nonhyperbolic ergodic measures with positive entropy and full support, [Arxiv.org](#)

**Lorenzo J. Díaz, Edgar Matias**, Non-hyperbolic Iterated Function Systems: semifractals and the chaos game, [Arxiv.org](#)

**Lorenzo J. Díaz, Sebastián A. Pérez**, Hénon-like families and blender-horseshoes at non-transverse heterodimensional cycles, [Arxiv.org](#)

**Carlos Tomei**, Teaching as an indicator of mathematical practices, - [PDF](#)

**Sinesio Pesco, Orlando Fonseca Guilarte, Simone Diniz Junqueira Barbosa**, Simplified Graph-based Visualization for Scientific Publication, [Arxiv.org](#)

**Gabrielle Saller Nornberg**,  $C^{1,\alpha}$  regularity for fully nonlinear elliptic equations with superlinear growth in the gradient [Arxiv.org](#)

**Lorenzo J. Díaz, Katrin Gelfert, Michal Rams, Tiane Marcarini**, The structure of the space of ergodic measures of transitive partially hyperbolic sets [Arxiv.org](#)

**Lorenzo J. Díaz, Katrin Gelfert, Bruno Santiago**, Weak\* and entropy approximation of nonhyperbolic measures: a geometrical approach [Arxiv.org](#)

**Lorenzo J. Díaz; Sebastián A. Pérez**, Blender-horseshoes in center-unstable Hénon-like families [Arxiv.org](#)

**Boyan Sirakov, Gabrielle Nornberg**, A priori bounds and multiplicity for fully nonlinear equations with quadratic growth in the gradient [Arxiv.org](#)

**Boyan Sirakov, Nikola Kamburov**, Uniform a priori estimates for positive solutions of the Lane-Emden equation in the plane [Arxiv.org](#)

**Carlos Tomei, André Zaccur, Marta Calanchi**, Global folds between Banach spaces as perturbations [Arxiv.org](#)

**Edgard A. Pimentel**, Regularity theory for the Isaacs equation through approximation methods [Arxiv.org](#)

**Nicolau C. Saldanha, Emília Alves**, Results on the homotopy type of the spaces of locally convex curves on  $S^3$  [Arxiv.org](#)

**Nicolau C. Saldanha, Pedro Zühlke**, Spaces of curves with constrained curvature on hyperbolic surfaces [Arxiv.org](#)

**Ricardo Alonso, Bertrand Lods, Véronique Bagland**, Convergence to self-similarity for ballistic annihilation dynamics [Arxiv.org](#)

## 2017

**Lorenzo J. Díaz, Katrin Gelfert, Michal Rams**, Entropy spectrum of Lyapunov exponents for nonhyperbolic step skew-products and elliptic cocycles. [Arxiv.org](#)

**Ricardo Alonso, Irene M. Gamba, Minh-Binh Tran**, The Cauchy problem for the quantum Boltzmann equation for bosons at very low temperature. [Arxiv.org](#)

**Ricardo J. Alonso, Irene M. Gamba, Sri Harsha Tharkabhushanam**, Convergence and error estimates for the Lagrangian based Conservative Spectral method for Boltzmann Equations [Arxiv.org](#)

**Carlos Tomei, Thomas Lewiner, Tiago Novello, Joao Paixao**, Gradient Line Fields on Surfaces [Arxiv.org](#)

**Alessandro Alla, Valeria Simoncini**, Order reduction approaches for the algebraic Riccati equation and the LQR problem- [Arxiv.org](#)

**Alessandro Alla, Michael Hinze, Oliver Lass, Stefan Ulbrich**, A Certified Model Reduction Approach for robust optimal control with PDE constraints - [Arxiv.org](#)

**Boyan Sirakov, Carlos Tomei, André Zaccur**, Results of Ambrosetti-Prodi type for non-selfadjoint elliptic operators- [Arxiv.org](#)

**Alessia Mandini, Milena Pabiniak**, On the Gromov width of polygon spaces- [Arxiv.org](#)

**Carlos Hugo Jiménez, Marcos Montenegro, Julian Haddad**, Sharp affine weighted  $L_p$  Sobolev type inequalities - [Arxiv.org](#)

**David Martínez Torres, Ignasi Mundet i Riera**, Nontrivial bundles of coadjoint orbits over  $S^2$  - [Arxiv.org](#)

**David Martínez Torres, Eva Miranda**, Zeroth Poisson homology, foliated cohomology and perfect Poisson manifolds - [Arxiv.org](#)

**Edgard A. Pimentel, Ricardo Castillo**, Interior Sobolev regularity for fully nonlinear parabolic equations - [Arxiv.org](#)

**Marcos Craizer, Ronaldo Alves Garcia**, Quadratic Points of Surfaces in Projective 3-Space - [Arxiv.org](#)

**Marcos Craizer, Ady Cambraia Jr.**, Envelope of Mid-Hyperplanes of a Hypersurface - [Arxiv.org](#)

**Marcos Craizer, Ralph Teixeira, Vitor Balestro**, Discrete Cycloids from Convex Symmetric Polygons - [Arxiv.org](#)

**Boyan Sirakov**, Boundary weak Harnack estimates and quantitative strong maximum principles for uniformly elliptic PDE - [Arxiv.org](#)

**Nicolau C. Saldanha, Juliana Freire, Caroline J. Klivans, Pedro H. Milet**, On the connectivity of spaces of three-dimensional tilings - [Arxiv.org](#)

**Rafael O. Ruggiero, Artur O. Lopes**, Large deviations and Aubry-Mather measures supported in nonhyperbolic closed geodesics - [Arxiv.org](#)

**Simon Griffiths, Daniel Ahlberg, Svante Janson, Robert Morris**, Competition in growth and urns - [Arxiv.org](#)

**Rafael O. Ruggiero, Katrin Gelfert**, Geodesic flows modeled by expansive flows- [Arxiv.org](#)

**Ricardo Sa Earp, Eric Toubiana**, A reflection principle for minimal surfaces in smooth three manifolds - [Arxiv.org](#)

**Ricardo Alonso, Irene M. Gamba, Maja Tasković**, Exponentially-tailed regularity and time asymptotic for the homogeneous Boltzmann equation - [Arxiv.org](#)

**Silvius Klein, Pedro Duarte**, Topological obstructions to dominated splitting for ergodic translations on the higher dimensional torus - [Arxiv.org](#)

**C. Lizana, W. Ranter** - Topological obstructions for robustly transitive endomorphisms on surfaces - [Arxiv.org](#)

**Lorenzo J. Díaz, Edgar Matias** - Attracting graphs of skew products with non-contracting fiber maps - [Arxiv.org](#)

**Jaqueline Siqueira, José Ferreira Alves e Vanessa Ramos** - Equilibrium stability for non-uniformly hyperbolic maps - [Arxiv.org](#)

**Lorenzo J. Díaz, Edgar Matias** - Stability of the Markov operator and synchronization of Markovian random products - [Arxiv.org](#)

**Karina Marin, Chao Liang, Jiagang Yang**, - Lyapunov exponents of partially hyperbolic volume-preserving maps with 2-dimensional center bundle - [Arxiv.org](#)

**Simon Griffiths, Béla Bollobás, Robert Morris, Leonardo Rolla, Paul Smith**, - Nucleation and growth in two dimensions - [Arxiv.org](#)

**Silvius Klein**, - Anderson localization for one-frequency quasi-periodic block Jacobi operators - [Arxiv.org](#)

**Lorenzo J. Díaz, Katrin Gelfert, Maik Gröger, Tobias Jäger**, Hyperbolic graphs: critical regularity and box dimension - [Arxiv.org](#)

**Sirakov, B.; Tomei, C.; Zaccur, A.** Results of Ambrosetti-Prodi type for non-selfadjoint elliptic operators - [Arxiv.org](#)

**Silvius Klein, Pedro Duarte,** Continuity, positivity and simplicity of the Lyapunov exponents for quasi-periodic cocycles - [Arxiv.org](#)

## 2016

**Tomei, C.** - Retórica e expressividade da Matemática. - [PDF](#)

**M.Craizer, M.J.Saia and L.F.Sánchez.** - Affine Focal Sets of Codimension 2 Submanifolds contained in Hypersurfaces - [Arxiv.org](#)

**M.Craizer, R.Teixeira and V.Balestro.** - Closed Cycloids in a Normed Plane - [Arxiv.org](#)

**M.Craizer and S.Pesco.** - Affine Geometry of Equal-volume Polygons in 3-space - [Arxiv.org](#)

**Díaz, L.J.; Gelfert, K.; Rams, M.** - Nonhyperbolic step skew-products: Entropy spectrum of Lyapunov exponents - [PDF](#)

**Díaz, L. J.; Bochi, J.; Bonatti, C.**- A criterion for zero averages and full support of ergodic measures - [PDF](#)

**Torres, D.M.; Crainic, M.; Fernandes, R.J.** - Regular poisson manifolds of compact types - [PDF](#)

**Frejlich, P.; M Arcut, I.** - On realizations of Dirac structures by closed two-forms - [PDF](#)

**Frejlich, P.; M Arcut, I.** - normal form for poisson maps and symplectic groupoids around poisson transversals - [PDF](#)

**Frejlich, P.; M Arcut, I.** - The normal form Theorem around poisson transversals - [PDF](#)

**C. H. Jiménez, P. L. de Nápoli, J. Haddad, M. Montenegro** - The Sharp Affine L2 Sobolev Trace Inequality and Variants - [PDF](#)

**Castro, A.; Arnaudon, A.; Holm, D.D.** - Noise and dissipation in rigid body motion - [PDF](#)

**Castro, A.; Arnaudon, A.; Holm, D.D.** - Noise and dissipation on coadjoint orbits - [PDF](#)

**Díaz, L. J.; Bonatti, C.; Crovisier, S.; Wilkinson, A.**- What is.... a blender? - [PDF](#)

**Díaz, L.J.; Matias, E.** - Non-hyperbolic iterated function systems: attractors and stationary measures - [PDF](#)

**Díaz, L.J.; Gelfert, K.; Rams, M.** - Nonhyperbolic step skew-products: Ergodic approximation - [PDF](#)

**Torres, D.M.; Miranda, E.** - Weakly Hamiltonian actions - [PDF](#)

**Torres, D.M.; Crainic, M.; Fernandes, R. L** - Poisson Manifolds of Compact Types (PMCT 1) - [PDF](#)

**Torres, D. M.; Frejlich, P.; Miranda, E.** - A Note On Symplectic Topology Of b-Manifold - [PDF](#)

**Earp, R.S; Toubiana, E.** - Concentration of total curvature of minimal surfaces in  $H^2 \times \mathbb{R}$  - [PDF](#)

2015

**Castro, A.; Howard, W.; Shanbrom, C.**-Stratification of the monster/sample tower under the Diffeomorphism group of  $\mathbb{R}^3$  - [PDF](#)

**Craizer, M.** Equiaffine Characterization of Lagrangian Surfaces in  $\mathbb{R}^4$  - [PDF](#)

**Craizer, M.; Martini, H.** Involutives of Polygons of Constant Width in Minkowski Planes - [PDF](#)

**Díaz, L.J.; Esteves, S.; Rocha, J.** Skew product cycles with rich dynamics: from totally non-hyperbolic dynamics to fully prevalent hyperbolicity - [PDF](#)

**Díaz, L.J.; Bochi, J.; Bonatti, C.** - Robust criterion for the existence of nonhyperbolic ergodic measures - [PDF](#)

**Torres, D. M.** - The Diffeomorphism Type of Canonical Integrations of Poisson Tensors on Surfaces - [PDF](#)

**Saldanha, N.C; Tomei, C. ; Freire, J;** - Scaling limits of discrete copulas are bridged Brownian sheets - [PDF](#)

**Craizer M. ; Junior. A.C.** - Envelope of Mid-Planes of Surfaces in  $\mathbb{R}^3$  - [PDF](#)

**Craizer, M.; Marcelo J. Saia and Luis F. S** - Equiaffine Darboux Frames for Codimension 2 Submanifolds contained in Hypersurfaces - [PDF](#)

**Saldanha, N.C; Millet, P.H** - Domino tilings of three-dimensional regions: flips, trits and twists - [PDF](#)

**Earp, R.S; Nelli, B; Toubiana, E .** - Minimal Graphs in  $\text{Nil}_3$  : existence and non-existence results - [PDF](#)

**Ruggiero, R.; Foulon, P.** A first integral for  $C^\infty$ , K-Basic Finsler surfaces and applications to rigidity - [PDF](#)

**Schweitzer, P.A.; Meniño, C.** Exotic open 4-manifolds which are non-leaves - [PDF](#)

**Scala, L.** Higher symmetric powers of tautological bundles on Hilbert schemes of points on a surface - [PDF](#)



**Scala, L.** Singularities of the Isospectral Hilbert Scheme - [PDF](#)

**Scala, L.** Notes on diagonals of the product and symmetric variety of a surface - [PDF](#)

**Saldanha, N.C.; Telles, M.** - Spaces of completions of elementary theories and convergence laws for random hypergraphs - [PDF](#)

**Saldanha, N.C.; Zühlke, P.** - Homotopy type of spaces of curves with constrained curvature on flat surfaces - [PDF](#)

**Tomei, C.; Zaccur, A.; Calanchi, M.** - Abundance of cusps and a converse to the Ambrosetti Prodi theorem - [PDF](#)

## 2014

**M.Craizer, W.Domitrz and P.de M.Rios.** - Even Dimensional Improper Affine Spheres - [Arxiv.org](#)

**Ruggiero, R.; Lazrag, A.; Rifford, L.** Franks' Lemma For  $C^2$ -MAÑÉ Perturbations of Riemannian Metrics and Applications to Persistence - [PDF](#)

**Lewiner T.; Faugeron, D.; Vieira, ..** Simplified training for gesture recognition - [PDF](#)

**Saldanha, N.; Milet, P.H.** Flip invariance for domino tilings of three-dimensional regions with two floors - [PDF](#)

**Schweitzer, P.A.; Souza, S.F.** Classical invariants of Legendrian knots in the 3-dimensional torus - [PDF](#)

**Castro, A.; Howard, W.** Spelling rules for the monster/semple tower - [PDF](#)

**Torres, D.M; Pino, del A.; Presas, F.** - Transverse Geometry of Foliations Calibrated by Non-Degenerate Closed 2-Forms - [PDF](#)

**Torres, D.M.** - Semisimple Coadjoint Orbits and Cotangent Bundles - [PDF](#)

**Alonso, R.; Lods, B.** Boltzmann Model for Viscoelastic Particles: Asymptotic Behavior, Pointwise Lower Bounds and Regularity. - [PDF](#)

**Bochi, J.; Milet, P.H.** Peano Curves with Smooth Footprints - [PDF](#)

**Ruggiero, R.; Gelfert, K.** On Geodesic Flows Modeled by Expansive Flows up to Time-Preserving Semi-conjugacy - [PDF](#)

**Saldanha, N.; Millet, P.H.** - Domino tilings of three-dimensional regions: flips, trits and twists - [PDF](#)

**Saldanha, N.; Zühlke, P.** Homotopy type of spaces of curves with constrained curvature on flat surfaces - [PDF](#)

**Díaz, L.J.; Marcarini, T.** Generation of spines in porcupine-like horseshoes - [PDF](#)

**Tomei, C.; Zaccur, A.; Carlanchi, M.** Fibers and global geometry of functions - [PDF](#)

**Lewiner, T.; Burton, B.A.; Paixao, J.; Spreer, J.** Parameterized complexity of discrete Morse theory - [PDF](#)

## 2013

**Bochi, J.; Rams, M.** The Entropy Of Lyapunov-Optimizing Measures Of Some Matrix Cocycles - [PDF](#)

**Saldanha, N.; Zühlke, P.** Spaces of curves with constrained curvature on flat surfaces, I - [PDF](#)

**Schweitzer, P.A.; Souza, S.F.** Manifolds that are not leaves of codimension one foliations - [PDF](#)

**Castro, A.; Howard, W.** A Semple approach to Goursat: The multi-flag case - [PDF](#)

**Silvestre, L.; Sirakov, B.** Overdetermined problems for fully nonlinear elliptic equations - [PDF](#)

**Silvestre, L.; Sirakov, B.** Boundary regularity for viscosity solutions of fully nonlinear elliptic equations - [PDF](#)

**Medeiros, E.; Ingrid, L.; Pesco, S.; Silva, C.** Fast Adaptive Blue Noise on Polygonal Surfaces - [PDF](#)

**Bochi, J.; Morris, D. I.** Continuity Properties of the Lower Spectral Radius - [PDF](#)

**Gonçalves, P.; Bernardin, C.; Landim, C.** Entropy of Non-Equilibrium Stationary Measures of Boundary Driven Tasep - [PDF](#)

**Gonçalves, P.; Jara, M.** Nonlinear Fluctuations of Interacting Particle Systems - [PDF](#)

**Tomei, C.** The Toda Lattice, Old And New - [PDF](#)

**Castro, A.; Lessig, C.** The Geometry of Radiative Transfer - [PDF](#)

**Ruggiero, R. O.** Hopf Conjecture Holds for Analytic, K-Basic Finsler 2 Tori Without Conjugate Points - [PDF](#)

**Castro, A.; Koiller, J.** On the dynamic Markov–Dubins problem: from path planning in robotics and biolocomotion to computational Anatomy- [PDF](#)

**Lewiner, T.; Nascimento, R.** Streamline-based topological graph construction with application to self-animated images - [PDF](#)

**Lewiner T.; Paixão J.** Discrete morse gradient fields with stable matching - [PDF](#)

**Díaz, L.J.; Kiriki, S.; Shinohara, K.** Blenders in center unstable Hénon-like families: with an application to heterodimensional bifurcations. - [PDF](#)

**Tomei, C.; Zaccur, A.** Geometric aspects of Ambrosetti-Prodi operators with Lipschitz nonlinearities - [PDF](#)

**Saldanha, N.; Zühlke, P.** On the components of spaces of curves on the 2-sphere with geodesic curvature in a prescribed interval - [PDF](#)

**Pesco, S.; Sá, L.; Lopes, H.; Bordignon, A.L.; Figueiredo, L.H.** Point-based rendering of implicit surfaces in  $\mathbb{R}^4$  - [PDF](#)

**Sá Earp, R.; Nelli B.; Toubiana E.** Maximum principle and symmetry for minimal hypersurfaces in  $H^n \times \mathbb{R}$  - [PDF](#)

**Lizana, C.; Pinheiro, V.; Varandas, P.** Contribution to the ergodic theory of robustly transitive maps - [PDF](#)

**Díaz, L.J.; Gelfert, K.** Porcupine-like horseshoes topological and ergodic aspects - [PDF](#)

**Díaz, L.J.; Gelfert, K.; Rams, M.** Abundant rich phase transitions in step skew products - [PDF](#)

**Bochi, J.; Navas, A.** Almost reduction and perturbation of matrix cocycles - [PDF](#)

**Bochi, J.** Generic linear cocycles over a minimal base - [PDF](#)

**Lewiner T.; Miranda L.; Vieira T.; Martínez D.; Vieira, A. W.; Campos, M. F. M.** Online gesture recognition from pose kernel learning and decision forests - [PDF](#)

**Paixão, J.; Burton B. A.; Spreer J.** Computational topology and normal surfaces: theoretical and experimental complexity bounds - [PDF](#)

**Craizer, M.** Symmetrization of convex planar curves - [PDF](#)

2012

**Bochi, J.; Díaz, L.J.; Bonatti, C.** Robust Vanishing of all Lyapunov exponents for iterated function systems - [PDF](#)

**Bochi, J; Gourmelon, N.** Note on the dimension of certain algebraic sets of matrices - [PDF](#)

**Bochi, J; Gourmelon, N.** Universal regular control for generic semilinear systems - [PDF](#)

**Castro, A.L.; Wyatt, C. H.** A monster tower approach to goursat multi-flags - [PDF](#)

**Craizer, M.** Singularities of convex Improper Affine Maps - [PDF](#)

**Craizer, M.; Teixeira, R.C; Da Silva, M.H.A.B.** Paralleloppositesidespolygons. - [PDF](#)

**Craizer, M; Rios, P.M.** Even dimensional improperaffinespheres - [PDF](#)

**Díaz, L.J.; Gelfert,K.; RamsM.** Almost complete Lyapunov spectrum in step skew-products - [PDF](#)

**Lewiner, T.; Miranda, L.; Vieira, T.; Martínez, D.; Vieira, A.W.; Campos, M.** Real-time gesture recognition from depth data through key poses learning and decision forests - [PDF](#)

**Lewiner, T.;Paixão, J; Burton, B. A.;Spreer, J.** Parameterized complexity of discrete morse theory. - [PDF](#)

**Lewiner, T.; Vieira, A. W.; Schwartz, W.; Campos, M.** Distance matrices as invariant features for classifying MoCap data - [PDF](#)

**Palmeira, C.F.B.; Eschenazi, C.S.** Intersections of Hugoniot curves with sonic surfaces in the wave Manifold - [PDF](#)

**Ruggiero, R.O.; Gomes, J.B.** Transitivity of finsler geodesic flows in compact surfaces without conjugate points and higher genus - [PDF](#)

**Ruggiero, R.O.; Jane, D.** Boundary of Anosov dynamics and evolution equations for surface - [PDF](#)

**Sá Earp, R.** Uniform a priori estimates for a class of horizontal minimal equations - [PDF](#)

**Sá Earp, R.** Uniqueness of minimal surfaces whose boundary is a horizontal graph and some bernstein problems in  $H^2 \times R$  - [PDF](#)

**Sá Earp, R.; Elbert, M.F.** All solutions of the CMC-equation in  $H^n \times R$  invariants by parabolic screw motion - [PDF](#)

**Sá Earp, R.; Hauswirth, L.; Nelli, B.; Toubiana, E.** A schoen theorem for minimal surfaces in  $H^2 \times R$ . - [PDF](#)

**Saldanha, N.C.** The homotopy type of spaces of locally convex curves in the sphere - [PDF](#)

**Sirakov, B.; Dupaigne, L.; Farina, A.** Regularity of the extremal solutions for the Liouville system - [PDF](#)

**Sirakov, B.; Felmer, P.; Quaas, A.** Sirakov, B.; Felmer, P.; Quaas, A. - Solvability of nonlinear elliptic equations with gradient terms - [PDF](#)

## 2011

**Abdenur, F.; Crovisier, S.** Transitivity and topological mixing for  $C^1$  diffeomorphisms. - [PDF](#)

**Díaz, L. J.; Gelfert, K.; Rams, M.** Rich phase transitions in step skew-products. - [PDF](#)

**Díaz, L.J.; Bonatti, C.; Kiriki, S.** Stabilization of heterodimensional cycles - [PDF](#)

**Díaz, L.J.; Bonatti, C.H.** Fragile cycles - [PDF](#)

**Freire, J; Spencer, J.** Proppian Random Walks in  $Z$  - [PDF](#)

**Lewiner, T.** Critical sets in discrete Morse theories: relating Forman and piecewise-linear approaches.

**Lewiner, T.; Andrade, M.** - Cálculo e estimação de invariantes geométricos: Uma introdução às geometrias euclidiana e afim - [PDF](#)

**Lewiner, T.; Andrade, M.; Cabral, A.; Melo, V.; Peixoto, A.** Curvas e superfícies implícitas: noções de geometria diferencial e discreta.

**Lopes, H.; Lage, M.; Carvalho, M.S.** Flows with suspended and floating particles. [PDF](#)

**Ruggiero, R.O.; Carneiro, M. J. D.** Birkhoff first theorem for Lagrangian, invariant tori in dimension 3. [PDF](#)

**Ruggiero,R.O.; Gomes, J.B.** Weak integrability of Hamiltonians in the two torus and rigidity.

**Ruggiero, R.O.; Rifford, L.** Generic properties of closed orbits of Hamiltonian flows from Mañé's viewpoint.

**Tomei,C.; Cal Neto, J.T.** Numerical Analysis of Semilinear elliptic Equations With Finite Spectral Interaction. [PDF](#)

**Tomei, C.; Da Silva, E.T.** The geometry of finite difference discretizations of semilinear elliptic operators. [PDF](#)

**Tomei, C.; Neto, J.T.C** A numerical algorithm for Ambrosetti-Prodi type operators. [PDF](#)

**Volchan, S.B.** De Newton à Boltzmann: O teorema Landford. [PDF](#)

**Craizer, M.** Visual contours and planar sections for affine immersions. [PDF](#)

**Craizer, M.; Teixeira, R. C.** Volume distance to hypersurfaces: relation with the Blaschke metric and the shape operator. [PDF](#)

**Díaz, L. J.; Bonatti, C.H.; Crovisier, S.; Gourmelon, N.** Internal perturbations of homoclinic classes: Non-domination, cycles, and self-replication. [PDF](#)

**Díaz, L. J.; Fisher, T.; Pacifico, M. J.; Vieitez, J. L.** Entropy-expansiveness for partially hyperbolic diffeomorphisms. [PDF](#)

**Díaz, L. J.; Gelfert, K.** Porcupine-Like Horseshoes: Transitivity, Lyapunov spectrum, and Phase Transitions. [PDF](#)

**Gomes, J.B.; Ruggiero, R.O.** Smooth k-basic finler compact surfaces with expansive geodesic flows are Riemannian.

**Lewiner, T.; Andrade, M.** Affine-invariant curvature estimators for implicit surfaces. [PDF](#)

**Lewiner, T.; Aleardi, L.C.; Fusy, E.** Optimal encoding of triangular and quadrangular meshes with fixed topology. [PDF](#)

**Lewiner, T.; Lopes, H.; Paixão, J.; Nascimento, R.** Topology aware vector field denoising. [PDF](#)

**Lewiner, T.; Lopes, H.; Paixão, J.; Pesco, S.; Vieira, T.; Bordignon, A.; Cabral, A.; Marques, C.; Custódio, L.; Lage, M.; Andrade, M.; Nascimento, R.; De Botton, S.; Mello, V.; Peixoto, A.; Martinez, D.** Tuning manifold harmonics filters. [PDF](#)

**Lewiner, T.; Vieira, T.; Martinez, D.; Peixoto, A.; Mello, V.; Velho, L.** Interactive 3d caricature from harmonic exaggeration. [PDF](#)

**Lewiner, T.; Pesco, S.; Lopes, H.; Mello, V.; Peixoto, A.** Fast dual generation of pointerless octrees. [PDF](#)



**Saldanha, N. C.; Tomei, C.; Leite, R. S.** Convergence rates to deflation of simple shift strategies. **PDF**

**Schweitzer, P.A.** Mathematics, Reality and God. **PDF**