

PERSONAL INFORMATION

Stefano Galatolo



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Born 13/04/1969 | Nationality Italian

Languages: Italian, English , French

CURRENT POSITION

Since may 2015: Associate Professor at Department of Mathematics, University of Pisa.

Previous positions

2002: Research collaborator, projects "Cluster15 - Piano Tecniche per Immagini" and "Metodi variazionali e topologici per lo studio dei fenomeni non lineari" (granted by italian ministry of research).

2002-2004: Assegno di ricerca (postdoc) at Univ. Pisa

2004-2015: Ricercatore Universitario (Assistant Professor) at Department of Mathematics, University of Pisa.

Education, habilitation

1992: Erasmus fellowship, "Universite Pierre et Marie Curie" Paris (Fr)

1997: Italian graduation (Laurea) "cum laude" in Mathematics with a thesis titled "Complessita' dei Nodi" (Complexity of Knots), advisors: R. Benedetti, F. Lazzeri, University of Pisa.

2002: PhD in Mathematics with a thesis titled "Information, Complexity and weak Chaos in Dynamical Systems. Theory and measurement methods", advisor: V. Benci, University of Pisa.

2013: Italian National habilitation for the position of associate professor in Mathematical analysis.

2014: Italian National habilitation for the position of full professor in Mathematical analysis.

2018: Italian National habilitation for the position of full professor in Mathematical analysis.

Institutional, editor responsibilities.

2013-2025: Scientific committee of Matematita (Inter-university centre for research, communication and informal teaching of Mathematics)

2013-2017: IRSES (Marie Curie Actions) "Brazilian-European partnership in Dynamical Systems" (BREUDS, Grant agreement ID: 318999): scientific coordinator for Pisa unit.

2012-2018 Editor for Chaos Solitons and Fractals (Elsevier)

Since 2013 Editorial board member of Discontinuity, Nonlinearity, and Complexity (L&H sci. Pub.)

► Since 2014 Section Editor for Journal of Fixed Point Theory and Applications (Springer-Birkhäuser Basel)

► 2016-2021 Director of Centro Interdipartimentale per lo Studio dei Sistemi Complessi (Interdepartmental center for the study of complex systems, Univ. Pisa)

Since 2015 Responsible for Job Placement activities, Dipartimento di Matematica, University of Pisa. (in this position I organized since 2017 several meetings between our students and companies or institutions interested to hire mathematicians this led to the formalization of the cycle of meetings "Matematici al Lavoro").

2016-2020 Member of the committee for the evaluation of research for the area of Mathematics and Computer Science for the University of Pisa.

2019-2022 Focus issues editor for Chaos Solitons and Fractals (Elsevier)

► Since 2023 Section editor for Chaos Solitons and Fractals (Elsevier)

VQR 2015-2019, evaluator.

Agence nationale de la recherche (ANR), Francia 2020, evaluator.

2020-2023 IOP SciNotes editorial board member (Mathematics and Computation)

Since 2020 Peer Review Ambassador (IOP Publishing)

Since 2021: Scientific committee of Istituto di Ricerca sul Territorio e l'Ambiente – "Leonardo" (Leonardo-IRTA),

2022-2024: Vice director of Centro Interdipartimentale per lo Studio dei Sistemi Complessi (Interdepartmental centre for the study of complex systems, Univ. Pisa)

Fondo italiano per la Scienza (FIS), Italia 2023, evaluator.

June 2023: Member of the selection committee for the "Chaos Solitons and Fractals" best poster prize, at the conference DCP23 (Dynamics and Complexity Pisa 2023).

► Since fall 2023: Chair for Climate Change Knowledge Hub.Circle U european university alliance

June 2024: Member of the selection committee for the best master thesis prize "Marcello Buiatti - Lo Stato Vivente della Materia".

June 2024: Member of the selection committee for "Chaos Solitons and Fractals best poster prize", per la conferenza DCP24 (Dynamics and Complexity Pisa 2024).

2024: guest editor for the special issue "Nonautonomous Dynamics in the Climate Sciences" for the journal Chaos (AIP Publishing).

Agencia Nacional de Investigación y Desarrollo (ANID), Chile 2024, evaluator.

► Since November 2024: Director of Centro Interdipartimentale per lo Studio dei Sistemi Complessi (Interdepartmental centre for the study of complex systems, Univ. Pisa)

2024-2025 Chaos (AIP) Focus Issue "Nonautonomous Dynamics in the Climate Sciences": guest Editor.

July 2025: Member of the selection committee for the best master thesis prize "Marcello Buiatti - Lo Stato Vivente della Materia".

July 2025: Member of the selection committee for "Chaos Solitons and Fractals best poster prize", for the conference DCP25 (Dynamics and Complexity Pisa 2025).

► Since 2025 *Section Board Member* for the section 'Complexity' of the journal Entropy (MDPI)

Teaching

I have experience in teaching:

Linear Algebra (first year, engineering students)

Analysis I (first year, engineering students)

Analysis II (first year or second year, engineering students)

Elements of probability (engineering students)

Ergodic Theory, random and deterministic dynamics (advanced courses for mathematics students or phd in applied sciences)

Visiting Positions

April 2008: Professeur invité at Ecole Normale Supérieure Paris, dept. of computer science (Fr)

April 2009: Professeur invité at Université Bretagne Occidentale, Laboratoire de Mathématique (Fr)

July 2010: Professeur invité at Université Bretagne Occidentale, Laboratoire de Mathématique (Fr)

August 2010: Visiting researcher. IMPA, Rio de Janeiro (Br)

July 2012: Professeur invité at Université Bretagne Occidentale, Laboratoire de Mathématique (Fr)

October 2013: Visiting Researcher. Newton Institute, Cambridge (UK)

April 2016: Visiting Researcher. ICERM, Brown University (USA)

Nov 2023-Nov-2024: Visiting Researcher University of North Texas (USA)

March 2025: Professeur invité at Université Lumière Lyon 2 (Fr)

Awards

2025 : Qin-Jiu-Shao Lecture 2025



Non-Academic Professional Experience

2005 : Court-Appointed Technical Consultancy. Provided expert advice in an arbitration case involving probabilistic and market analysis.

2025 : Collaboration with Pallora (<https://pallora.org/>), read the whitepaper at <https://pallora.org/whitepaper>).

Recent funded projects

2011: research project "Approssimazione rigorosa delle misure invarianti" funded by GNAMPA/INdAM, italian national institute for advanced mathematics. Principal investigator.

2011 ISCRA (italian high performance computing resources) research project "Rigorous Approximation of Invariant Measures in Dynamical Systems". Principal investigator.

2013 Lond. Math. Soc. Grant Award 41216. Investigator.
 2013-2017: EU Marie-Curie IRSES “Brazilian-European partnership in Dynamical Systems” (FP7-PEOPLE-2012-IRSES 318999 BREUDS): participant and scientific coordinator for the Pisa unit.
 2014-2017 Leverhulm Trust grant IN-2014-021, “Statistical properties of non uniformly hyperbolic dynamical systems: computer assisted proofs and rigorous computation.” investigator.
 2017-2019 University of Pisa research project “Dynamical systems in analysis, algebra, geometry and logic” Participant.
 2018-2019: research project “Stabilità e instabilità in sistemi con rumore, un approccio computer assistito.” funded by GNAMPA/INdAM, Italian national institute for advanced mathematics. Principal investigator.
 2019-2021: National research project PRIN “Regular and stochastic behaviour in dynamical systems” Participant.
 2020-2022: University of Pisa, progetto PRA “Combining Biomedical Signal Processing and Proteomics for a new Quantitative Stress” participant.
 2022-2025 Scientific manager (Responsabile Scientifico) for the project PON R&I 2014-2020 (FSE REACT-EU) funding one 3 years RTDA researcher position and one phd. position on the theme of “Mathematical methods for climate science”
 2023-2025 National research project “Stochastic properties of dynamical systems” (PRIN 2022NTKXCX) funded by the Italian Ministry of Education and Research, participant.

Conferences and advanced courses recently organized

“School on Computation and Computability in Dynamics” ICTP, Trieste, 2014
 “Computation in Dynamics”, ICERM, Brown University, USA, 2016
 “Chaotic phenomena in mathematical models”, Centro De Giorgi, Pisa, 2016
 “Ergodic Theory, Algorithms and Rigorous Computations”, Warwick University, 2017
 Director of the specialization course “Specialisti delle tecnologie per il digital Advertising” University of Pisa, 2017
 “Dynamics days Europe 2018”, sessions on “Ergodic theory and Dynamical systems”, 2018
 “PISA-HOKKAIDO-ROMA2 Summer School on Mathematics and Its Applications 2018”, 2018
 “Dynamical systems and beyond” Pisa, Dipartimento di Matematica, March 25-27, 2019.
 “Dcp’19, Dynamics and Complexity, Pisa 2019” July 1-3, 2019.
 “Response Theory and Its Applications in Geophysical Fluid Dynamics” October 14-16, 2019 Institut Henri Poincaré, Paris
 “Linear Response: Rigorous Results and Applications” 25 - 29 January 2021 Bernoulli Center, EPFL, Lausanne
 “International Conference on Mathematical Analysis and Applications in Science and Engineering” Porto, Portugal, in June 27th-June 29th 2022 (scientific committee)
 “DCP22 - Dynamics and Complexity Pisa 2022”, Pisa, Italy May 26-28 2022.
 Research course “Mathematical methods in climate science” by Michael Ghil (UCLA & ENS Paris) 4-13 July 2022.
 “Probabilistic methods in dynamics” Pisa, Centro de Giorgi, 29 May-1 June 2023.
 “DCP23 - Dynamics and Complexity Pisa 2023”, Pisa, 7-8 June 2023.
 “Hokkaido-Pisa-Roma Tor Vergata-Torino summer school and workshop” Torino, Aug. 28 – Sept. 8, 2023 (scientific committee)
 Dynamics Days Europe 2023, minisymposium “Mean field coupled systems, theory and applications” organizing committee.
 Citizen Science Pisa 2023, conferenza nazionale e workshop organizzativo sul tema della citizen science, Novembre 2023.
 Research minicourse “Dynamical Systems, Algebraic Topology, and Climate”, by M. Ghil and D. Sciamarella, University of Pisa, Jan 2024 (organizer).
 Workshop “Computer-assisted proofs, proof assistants and visualization in dynamical systems”, Centro de Giorgi, June 2024, Pisa (organizer).
 “DCP24 - Dynamics and Complexity Pisa 2024”, Pisa, June 2024 (organizer)
 “Hokkaido-Pisa-Roma Tor Vergata-Torino summer school” Hokkaido University, Japan Aug.-Sept. 2024 (scientific committee)
 2024: Guest editor for the special issue “Nonautonomous Dynamics in the Climate Sciences”, Chaos (AIP Publishing).
 Workshop “Nonlinearity, Complexity and Foundations in Mathematics” Centro de Giorgi, Pisa, Sept 2024 (organizer).
 Conference «DinAmici in Rio, Dynamics, Applications, Interactions », sept 2024, IMPA Rio de Janeiro,

(scientific committee).

Conference "DCP25 - Dynamics and Complexity Pisa 2025", Pisa, July 2025 (organizer)

Workshop "Mathematics, Physics and Climate" (Scuola Normale Superiore, July 12-th 2025, organizer).

Workshop "Coupled 80" 09 - 10 October 2025, Porto, Portugal, Scientific Committee

Hokkaido Summer Institute 2025 "Computational Methods in Dynamical Systems 2025", organizer.

Workshop "Dynamics, Economics and Climate Science", Università di Pisa, Nov. 2025, organizer.

Participation to conferences and seminars

I usually speak in conferences, workshop or invited seminars several times every year, recently:

September 2018: Dynamics Days Europe 2018, minisymposium "Random dynamical systems", invited talk.

November 2018: Fakultät für Mathematik, Technische Universität München, invited seminar.

May 2019: workshop "Incontri di Analisi Matematica tra Firenze, Pisa e Siena", invited talk.

June 2019: intensive period: "Ecosystem dynamics : stakes, data and models" Université Paris Saclay", invited talk.

June 2019: Département de Mathématiques d'Orsay, invited seminar.

June 2019: workshop "DINAMICI VI - the sixth workshop of the Italian dynamicists", invited talk.

July 2019: workshop "Ergodic theory and validated numerics" CIRM, Luminy, invited talk.

September 2019: workshop « Dynamique-Probabilités-Mesure » Paris, Marne La Vallée, invited talk.

February 2020: Meeting "Regular and stochastic behaviour in dynamical systems" Univ. Tor Vergata, Rome, invited talk

August 2020: International conference "Dynamics Days Digital 2020", talk.

October 2020: Centro de Matematica, Univ. do Porto, invited seminar (online).

December 2020: International Conference on "Applied Nonlinear Analysis and Soft Computing", Gauhati University, India, invited talk.

March 2021: AMS Spring Southeastern Sectional Meeting invited talk.

May 2021: SIAM Conference on Applications of Dynamical Systems (DS21), invited talk.

Giù. 2021: Dipartimento Matematica Roma Tor Vergata, invited talk.

Oct, 2021: Assam Don Bosco Univ. (India) invited talk. Title: "Existence of Noise Induced Order, a computer aided proof."

Oct. 2021: Queen Mary University of London (UK) invited talk. Title: "A general approach to self consistent transfer operators."

Apr 2022: Univ. Fed. Rio De Janeiro (Br) meeting "A Living Singularity" invited talk. Title: "Self consistent transfer operators in a weak and not so weak coupling regime. Invariant measures, convergence to equilibrium, linear response."

Nov. 2022: Université Aix Marseille (F) Invited talk. Title: "Self consistent transfer operators in a weak and not so weak coupling regime. Invariant measures, convergence to equilibrium, linear response."

Dec. 2022: Centro De Giorgi, meeting "Statistical and Computational Aspects of Dynamics", invited talk. Title: "Computation of invariant measures, coarse fine approach and Julia Dynamics".

Feb. 2023: Workshop "Nordeste Dinamico, Celebrating the 50th birthday of Carlos Gustavo Moreira" Invited talk. Title: "Self consistent transfer operators in a weak and not so weak coupling regime. Invariant measures, convergence to equilibrium, linear response."

May 2023: Conference "Probability and Dynamics", Biological Centre of Roscoff & Centre H. Lebesgue 9-12 May 2023. Invited talk. Title: "Self consistent transfer operators in a weak and not so weak coupling regime. Invariant measures, convergence to equilibrium, linear response."

May 2023: Workshop "Probabilistic methods in dynamics" Centro de Giorgi, Pisa, invited talk. Title: "Extreme events for discrete time sampling of stochastic differential equations."

Sept 2023: Dynamics Days Europe 2023, minisymposium "Nonautonomous dynamical systems in the climate science" invited talk. Title: "Extreme events for discrete time sampling of stochastic differential equations."

Dec 2023: workshop "Probabilistic methods in Dynamics" Univeristy of Porto, invited talk. invited talk. Title: "Rare Events and Hitting Time Distribution for Discrete Time Samplings of Stochastic Differential Equations"

Feb 2024: "International Conference on Emerging Frontiers in Nonlinear Complex Systems, Computational Intelligence and their Applications", Vellore inst. Technology, invited talk.

May 2024: ICMATS-2024, Assam Don Bosco University, invited talk.

May 2024: Università Roma Tor Vergata, invited seminar.

June 2024: International Conference on Mathematical Analysis and Applications in Science and Engineering, Porto, invited speaker.

December 2024: Methods in Nonlinear Dynamical Systems and Ergodic Theory, Warwick University, Discussion chair.

March 2025, INRIA Saint Etienne (Fr), Invited seminar.

July 2025 summer school "Empowering Climate Action: Islands on the Frontline", Berlin, invited lecture.

August 2025, workshop "Understanding rare events and their climatic impacts". Majorana

Foundation, Erice, invited speaker
 Sept 2025, workshop "Workshop Challenge Arcidosso25", Calstellto Aldobrandesco, Arcidosso (It), invited speaker.
 Oct 2025, University of Mumbai - Department of Atomic Energy, "Climate models, energy balance and the snowball Earth." invited lecture (online).
 Oct 2025, University of Oslo "Climate models, energy balance and the snowball Earth." invited lecture (online).

Intensive research courses

-Two 6 hours research minicourses for graduate summer schools at Hokkaido University
 "Hokkaido University Summer Institute: Introduction to dynamical systems", 2017
 "Lectures on Differential Equations and Differential Geometry", 2015

The lecture notes of such courses are available at arXiv:1510.02615.

-20 hours phd course: Summer School of Mathematics for Economic and Social Sciences
 "An introduction to random dynamical systems and their perturbations" organized by Centro de Giorgi and Scuola Superiore S. Anna. Venue: Fondazione Conservatorio Santa Chiara, San Miniato, Italy. September 2019.
 -8 hours advanced course, part of the school "Introduction to computational ergodic theory" Hokkaido summer institute. Sept 2021
 -8 hours advanced course, part of the school "Introduction to Computational Ergodic Theory" Hokkaido summer institute. Aug 2022
 -6 hours advanced course, part of the school "Introduction to Computational Ergodic Theory" Hokkaido summer institute. Aug 2023
 -30 hours hybrid research course "Dynamics of Complex Systems" for the doctoral school in mathematics of Pisa University and Circle U alliance. In collaboration with R. Castorri (SNS, It), M. Tanzi (King's College, UK). Spring 2024.
 -March 2025, 20 hours minicourse "Introduction to random dynamical systems and the transfer operator method" Université Lumière Lyon 2 (Fr)
 -4 hours advanced course, "Introduction to Computational Ergodic Theory" Hokkaido summer institute. Aug 2025

PhD. students advised

Mathieu Hoyrup, Université Paris Diderot-Paris VII, 2008. Thesis title: "Computability, Randomness and Ergodic Theory on Metric Spaces." (in cotutorship with G. Longo, ENS Paris)

Cristobal Rojas, École Polytechnique, 2008 Thesis title: "Randomness and Ergodic Theory: an Algorithmic point of view" (in cotutorship with G. Longo, ENS Paris)

Rafael Lucena, Univ. Fed. Rio de Janeiro, 2015. Thesis title: "Spectral Gap for Contracting Fiber Systems and Applications" (in cotutorship with Maria Jose Pacifico, UFRJ)

Ricardo Bioni Liberalquino, Univ. Fed. Rio de Janeiro, 2018. Thesis title: "Computation of stationary densities of systems with additive noise" (in cotutorship with Maria Jose Pacifico, UFRJ)

Luigi Marangio, Université de Bourgogne Franche-Comté, 2021 Thesis title: "Rigorous computational methods for understanding the statistical behavior of random dynamical systems" (in cotutorship with Christophe Guyeux, univ-fcomte).

International master stages
students advised

Takumi Chiara: international research stage “Applications of random dynamics” Hokkaido University Math. Dept., Japan (2020)

Renata Possobon: international research stage “Geometric and statistical properties of dynamical systems: disintegration of measures” Unicamp - FAPESP Brasil (2019-2020)

Hugo Marsan, international research stage “Statistical properties of dynamics, quantitative stability, linear response to perturbations” Ecole Normale Supérieure Paris-Saclay France (2020)

Selected published or accepted
papers

1. Flandoli, F., Galatolo, S., Giuliatti, P. et al. “Extreme Value Theory and Poisson Statistics for Discrete Time Samplings of Stochastic Differential Equations.” *Commun. Math. Phys.* 406, 231 (2025).
2. Froyland G., Galatolo S. “Optimal linear response for expanding circle maps” *Nonlinearity* 38 035001 (2025)
3. W. Bahsoun; S. Galatolo “Linear response due to singularities” *Nonlinearity* 37, v. 7 DOI: 10.1088/1361-6544/ad4946 (2024)
4. F. Antown, G. Froyland, S. Galatolo “Optimal linear response for Markov Hilbert-Schmidt integral operators and stochastic dynamical systems” *J. Nonlin. Sci.* (2022)
5. Galatolo S. Self-Consistent Transfer Operators: Invariant Measures, Convergence to Equilibrium, Linear Response and Control of the Statistical Properties
Comm. Math. Phys. (2022) DOI 10.1007/s00220-022-04444-4
6. Galatolo, S.; Monge, M.; Nisoli, I. Existence of noise induced order, a computer aided proof. *Nonlinearity* 33 (2020), no. 9, 4237–4276.
7. S. Galatolo, P. Giuliatti Linear Response for dynamical systems with additive noise *Nonlinearity* Volume 32, Number 6 (2019)
8. S. Galatolo Quantitative statistical stability, speed of convergence to equilibrium and partially hyperbolic skew products *Journal de l'Ecole Polytechnique - Mathématiques* (2018), 5, 377–405.
9. M. Bakiri C. Guyeux J. Couchot L. Marangio S. Galatolo A hardware and secure pseudorandom generator for constrained devices, *IEEE Transactions on Industrial Informatics* (2018) 14(8) 3754-3765
10. Bahsoun W. Galatolo S. Nisoli I. Niu X. A rigorous computational approach to linear response *Nonlinearity* (2018) 31(3) 1073–1109
11. S. Galatolo, M. Pollicott. Controlling the statistical properties of expanding maps. *Nonlinearity* 30 (2017), no. 7, 2737–2751
12. S. Galatolo, I. Nisoli. Rigorous computation of invariant measures and fractal dimension for maps with contracting fibers: 2D Lorenz-like maps *Erg. Th. Dyn. Sys* 36 (2016), no. 6, 1865–1891
13. S. Galatolo, J. Rousseau, B. Saussol. Skew products, quantitative recurrence, shrinking targets and decay of correlations *Erg. Th. Dyn. Sys* 35 (2015), no. 6, 1814–1845.
14. S. Galatolo, I. Nisoli. An elementary approach to rigorous approximation of invariant measures *SIAM J. Appl Dyn Sys.* 13 (2014), no. 2, 958–985.
15. S. Galatolo, M. Hoyrup, C. Rojas. Dynamics and abstract computability: computing invariant measures *Discrete Contin. Dyn. Sys.* 29 (2011), no. 1, 193–212.
16. S. Galatolo; M. J. Pacifico. Lorenz-like flows: exponential decay of correlations for the Poincaré map, logarithm law, quantitative recurrence. *Ergod. Th. Dyn. Sys.* 30 (2010), no. 6, 1703–1737.
17. S. Galatolo, M. Hoyrup, C. Rojas. Effective symbolic dynamics, random points, statistical behavior, complexity and entropy. *Inf. Comput.* 208 (2010), no. 1, 23–41.
18. F. Lorussi; S. Galatolo; D. De Rossi Textile-based electrogoniometers for wearable posture and gesture capture systems. *IEEE Sensors J.* (2009)
19. S. Galatolo. Dimension and hitting time in rapidly mixing systems *Math. Res. Lett.* 14 (2007), no. 5, 797–805.
20. S. Galatolo; D. H. Kim. The dynamical Borel-Cantelli lemma and the waiting time problems. *Indag. Math. Indag. Math. (N.S.)* 18 (2007), no. 3, 421–434.

Other published papers

1. Gianmarco Del Sarto, Stefano Galatolo, Sakshi Jain; Optimal response for stochastic differential equations by local kernel perturbations. *Chaos* 35 (7): 073121 (2025).
2. Castorini, R., Galatolo, S. & Tanzi, M. The Differential of Self-Consistent Transfer Operators and the Local Convergence to Equilibrium of Mean Field Strongly Coupled

- Dynamical Systems. *J Nonlinear Sci* **35**, 78 (2025).
3. Stefano Galatolo, Davide Faranda; A logarithm law for non-autonomous systems rapidly converging to equilibrium and mean field coupled systems. *Chaos* **35** (2): 023108 (2025).
4. S. Galatolo, M. Monge, I. Nisoli, F. Poloni, A general framework for the rigorous computation of invariant densities and the coarse-fine strategy *Cha. Soli. & Fra.*, 170 (2023)
5. T. Chihara, Y. Sato, I. Nisoli, S. Galatolo “Existence of multiple noise-induced transitions in a Lasota-Mackey map” *Chaos* **32**, 013117 (2022); <https://doi.org/10.1063/5.0070198>
6. Stefano Galatolo, Alfonso Sorrentino. Quantitative statistical stability and linear response for irrational rotations and diffeomorphisms of the circle. *Discrete and Continuous Dynamical Systems*, 2022, **42** (2) : 815-839. doi: 10.3934/dcds.2021138
7. Galatolo, Stefano; Marsan, Hugo Quadratic response and speed of convergence of invariant measures in the zero-noise limit. DOI:10.3934/dcds.2021078. *Disc. Cont. Dyn. Sys. Vol. 41* (11) pp.5303. (2021)
8. Galatolo, S, Holland, M, Persson, T, Zhang, Y.. Anomalous time-scaling of extreme events in infinite systems and Birkhoff sums of infinite observables. *Disc. Cont. Dyn. Sys. vol. 41*, p. 1799-1841 (2021)
9. Galatolo, S.; Sedro, J. Quadratic response of random and deterministic dynamical systems. *Chaos* **30** (2020), no. 2, 023113
10. Galatolo, S.; Lucena, R. Spectral gap and quantitative statistical stability for systems with contracting fibers and Lorenz-like maps. *Discrete Contin. Dyn. Syst.* **40** (2020), no. 3, 1309–1360.
11. Marangio, L.; Sedro, J.; Galatolo, S.; Di Garbo, A.; Ghil, M. Arnold maps with noise: differentiability and non-monotonicity of the rotation number. *J. Stat. Phys.* **179** (2020), no. 5-6, 1594–1624.
12. Marangio L, Galatolo S, Fronzoni L, Chillemi S, Di Garbo A 4Phase-locking patterns in a resonate and fire neural model with periodic drive. *Bio Systems* (2019)
13. Bioni L, iberlquino R, Monge M, Galatolo S, Marangio L. Chaotic Itinerary in Random Dynamical System Related to Associative Memory Models *Mathematics* (2018) **6**(3) 3
14. Galatolo S Nisoli I Pacifico M Decay of Correlations, Quantitative Recurrence and Logarithm Law for Contracting Lorenz Attractors *Journal of Statistical Physics* (2018) **170**(5) 862-882
15. Galatolo S. Quantitative statistical stability and convergence to equilibrium. An application to maps with indifferent fixed points *Chaos, Solitons and Fractals* (2017) **103** 596-601
16. W. Bahsoun; S. Galatolo; I. Nisoli; X. Niu. Rigorous Approximation of Diffusion Coefficients for Expanding Maps. *J. Stat. Phys.* (2016)
17. S. Galatolo, M. Monge, I. Nisoli. Rigorous approximation of stationary measures and convergence to equilibrium for iterated function systems. *Journal of Physics. A, Mathematical and Theoretical* (2016)
18. S. Galatolo, B. Saussol, I. Nisoli . An elementary way to rigorously estimate convergence to equilibrium and escape rates. *Journal of Computational Dynamics* (2015)
19. S. Galatolo, I. Nisoli, C. Rojas. Probability, statistics and computation in dynamical systems. *Mathematical Structures in Computer Science* (2015)
20. V. Araujo, S. Galatolo, MJ Pacifico. Decay of correlations for maps with uniformly contracting fibers and logarithm law for singular hyperbolic attractors *Math. Zeitschrift* (2014)
21. V. Araujo, S. Galatolo, M.J. Pacifico. Statistical Properties of Lorenz-like Flows, Recent Developments and Perspectives. *Int. J. of Bifurcation and Chaos* (2014)
22. F. Lorussi; S. Galatolo; R. Bartalesi; D. De Rossi Modeling and characterization of extensible wearable textile-based electrogoniometers *IEEE Sensors J.* (2013)
23. S. Galatolo, M. Hoyrup, C. Rojas. Statistical properties of dynamical systems – Simulation and abstract computation. *Chaos, Solitons and Fractals* (2012)
24. S. Galatolo, I. Nisoli. Shrinking targets in fast mixing flows and the geodesic flow on negatively curved manifolds *Nonlinearity* (2011).
25. S. Galatolo, M. Hoyrup, C. Rojas. Computing the speed of convergence of ergodic averages and pseudorandom points in computable dynamical systems. *Electronic Proc. in Theor. Comp. Sci.* (2010)
26. L. Calcagnile; S. Galatolo; G. Menconi. Non-sequential recursive pair substitutions

- and numerical entropy estimates in symbolic dynamical systems. *J. Nonlinear Sci.* (2010)
27. S. Galatolo, P. Peterlongo. Long hitting time, slow decay of correlations and arithmetical properties. *Disc. Cont. Dyn. Sys.* (2010)
 28. V. Benci, S. Galatolo, M. Ghimenti. An elementary approach to stochastic differential equations using the infinitesimals. *Contemporary Math.*, AMS (2010)
 29. S. Galatolo. Hitting time in regular sets and logarithm law for rapidly mixing dynamical systems. *Proc. Am. Math. Soc.* (2010).
 30. F. Lorussi, C. Caudai, De Rossi D., S. Galatolo. Stiffness and compliance control in dynamical systems driven by muscle-like actuators. In: *Proceeding of ASME Dynamic Systems and Control Conference* (2010)
 31. S. Galatolo, F. Lorussi, C. Caudai. Stiffness control of biomimetic systems through recruitment of bundle elastomeric actuators. In: *Dielectric elastomers as electromechanical transducers.* (2008)
 32. S. Galatolo, M. Hoyrup, C. Rojas. A constructive Borel-Cantelli lemma. Constructing orbits with required statistical properties. *Theor. Comp. Sci.*, (2009)
 33. Galatolo S. Metric complexity for weakly chaotic systems. *Chaos* (2007)
 34. F. Lorussi, S. Galatolo, C. Caudai C., A. Tognetti, D. De Rossi D. Compliance control and Feldman's muscle model. In: *Proceedings of the First IEEE/RAS-EMBS International Conference on Biomedical Robotics and Biomechatronics* (2006)
 35. S. Galatolo; D. H. Kim; K. Park. The recurrence time for ergodic systems with infinite invariant measures. *Nonlinearity* (2006)
 36. S. Galatolo. Hitting Time and Dimension in Axiom A Systems, Generic Interval Exchanges and an Application to Birkoff Sums, *J. Stat. Phys.* (2006)
 37. S. Galatolo. Dimension via waiting time and recurrence, *Math. Res. Lett.* (2005)
 38. V. Benci, S. Galatolo. Optimal information measures for weakly chaotic dynamical systems. *Electr. Notes in Discrete Math.* (2005).
 39. S. Galatolo S, M. Degli Esposti. Recurrence near given sets and the complexity of the Casati-Prosen map. *Chaos, Solitons and Fractals*, (2005)
 40. C. Bonanno, S. Galatolo, S. Isola. Recurrence and algorithmic information, *Nonlinearity* (2004)
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