



11/07/1967: Nato a Modica (RG, Italia)

1990-1994: Laurea in Fisica presso l'Università di Catania

1995-2001: Attività privata come socio fondatore di due diverse società di informatica (la Worksoft S.A.S di Trecastagni - CT - e la Zeternet P.S.C.R.L. di Modica - RG); dealer Autodesk con Asia Computers; insegnante in corsi di Autocad 2D & 3D; sviluppatore di progetti CAD (2D-3D), database, siti web, etc...

1997-2001: Incarichi annuali pre-ruolo per l'insegnamento di Matematica e Fisica in diverse scuole secondarie superiori di Catania (Turrisi Colonna, Lombardo Radice, Liceo Cutelli, Liceo Boggio Lera);

2001-2008: Ingresso in ruolo nella scuola secondaria superiore come docente di Matematica e Fisica presso l'Istituto Statale d'Arte di Catania, in quanto vincitore del Concorso Nazionale a cattedre del 2000-2001 (classe di concorso A049); in congedo straordinario dal 2002 al 2005 e poi in servizio a tempo ridotto fino al 31/12/2008;

2002-2005: Ph.D. in Fisica Teoria presso l'Università di Catania;

2005-2007: Post-doc fellowship FIS/02 "Fisica teorica, modelli e metodi matematici" presso il Dipartimento di Fisica e Astronomia dell'Università di Catania;

2007-2008: Collaborazione di ricerca con il Dipartimento di Fisica e Astronomia dell'Università di Catania;

2008: Post-doc fellowship FIS/02 "Fisica teorica, modelli e metodi matematici" presso il Dipartimento di Fisica e Astronomia dell'Università di Catania;

2009-2015: Permanent position come Ricercatore a tempo indeterminato e Professore Aggregato presso il Dipartimento di Fisica e Astronomia dell'Università di Catania;

Dal 2009: Titolare del corso di "Fisica Statistica e Sistemi Dinamici" (CdL Triennale in Fisica) e del corso di "Fisica Generale" (CdL Triennale in Scienze Ambientali e Naturali);

Dal 2015: Professore Associato confermato di Fisica Teorica presso il Dipartimento di Fisica e Astronomia dell'Università di Catania;

Dal 2002: Associato di ricerca presso l'INFN (National Institute for Nuclear Physics), Sezione di Catania;

Dal 2014: Coordinatore Locale delle Iniziative Specifiche "PIECES" e, successivamente, "PLEXNET" dell'INFN;

Dal 2010: Co-Director della LIPARI INTERNATIONAL SCHOOL ON COMPLEX SYSTEMS - Lipari, Italy;

2010: Vincitore (con Andrea Rapisarda e Cesare Garofalo) del Premio Internazionale "Ig-Nobel" 2010 per il Management - Harvard University e M.I.T. (Boston, USA) <http://www.pluchino.it/ignobel.html>;

Dal 2014: Membro del Centro di Ricerca Interdisciplinare sulla Diagnosi e Terapia dei Tumori Cerebrali dell'Università di Catania;

2014-2016: Partecipazione al progetto di ricerca "Reti multi-layer ed efficienza dei processi decisionali" finanziato dall'Ateneo di Catania;

Dal 2015: Membro del "Centro Interdipartimentale di Studi su Pascal e il '600" (CESPES) dell'Università di Catania;

Dal 2015: Responsabile del "Counseling" per gli studenti del Corso di Laurea Triennale in Fisica;

Dal 2016: Membro del Collegio di Dottorato in "Sistemi Complessi per le Scienze Fisiche, Socio-economiche e della Vita" dell'Università di Catania;

Dal 2017: Membro dello Scientific Program Committee della conferenza annuale "Summer Solstice Conference on Discrete Models of Complex Systems";

Dal 2017: Membro del CCS/ITALY, "Italian Regional Chapter on Complex Systems";

2017-2018: Partecipazione al progetto di ricerca "Studio di sistemi complessi su reti multilayer con simulazioni ad

Dal 2018: Membro del Comitato Scientifico della Collana di "Computational Social Science" della Franco Angeli Editore;

Dal 2018: Incaricato di ricerca scientifica presso INFN, Sezione di Catania.

Luglio 2018: Conseguimento della Abilitazione Scientifica Nazionale a professore di prima fascia nel settore 02/A2, Fisica teorica della interazioni fondamentali.

Settori Attività di Ricerca

Meccanica statistica; Dinamica e termodinamica di sistemi con interazioni a lungo raggio; Sistemi complessi; Transizioni di fase e fenomeni critici; Criticità auto-organizzata; Sistemi vetrosi; Chaos e dinamiche non lineari; Frattali; Turbolenza; Fisica del plasma; Analisi degli esperimenti di "ether-drift" e struttura del vuoto; Gravità emergente; Sincronizzazione nei sistemi a molti corpi; Teoria delle reti complesse applicate a sistemi fisici, biologici, sociali ed economici; Simulazioni numeriche; Modelli di simulazione ad agenti

Indicatori Bibliometrici

H-Index: 18 (Scopus, Luglio 2018)

Citazioni: 1067 (Scopus, Luglio 2018)

Sito Web: <http://www.dfa.unict.it/home/pluchino/>

Referee di svariate Riviste Internazionali, tra cui:

PLOS ONE, Physical Review E, Chaos, International Journal of Modern Physics C, Physica A, Journal of Statistical Physics, Europhysics Letters, Chaos, Entropy, Eur. Phys. Journal B, Journal of Artificial Societies and Social Simulations (JASSS)

Conferenze e Progetti Internazionali

- International Workshop '*Stochastic Systems: from randomness to complexity*' (29-31 July 2002) – Erice (TP), Centro Ettore Majorana - Uditore
- International Workshop '*Energy and information transfer in biological systems*' (18-22 settembre 2002) – S.Tecla Palace Hotel – Acireale (CT) - Uditore
- International Workshop "*Anomalous distributions, non-linear dynamics and non-extensivity*" – (2002) Santa Fè (New Mexico – USA) - Uditore
- Workshop su Biologia e Sistemi complessi – Università di Firenze (2002)
- Convegno internazionale "*Frontier Science 2003 - A non linear world: the real world*" – Università di Pavia (2003) - Presentazione di un poster
- Scuola internazionale E.Fermi "*The physics of Complex Systems: new advances and perspectives*" – (2003) Varenna (Lago di Como) – Presentazione di un poster
- Convegno internazionale "*Next 2003 – News and expectations in thermostatics*" – (2003) Villasimius (Cagliari). Talk presentation
- Conferenza Internazionale "*Trends and perspective in extensive and non-extensive statistical mechanics*" in honour of Constantino Tsallis 60th birthday – Angra dos Reis (Brazil) 2003 - Talk presentation
- "*International Conference on Complex Systems*" - ICCS 2004 (Boston - USA) - Presentazione di un poster
- International Conference "*Experimental Chaos 2004*" (Firenze, 2004) - Presentazione di un poster

- Invited talk to the International conference "*Complexity and Nonextensivity: New Trends in Statistical Mechanics*" - Yukawa Institute for Theoretical Physics - (14-18 March 2005) Kyoto, Japan
- 3rd NEXT International Conference "*News Expectations and Trends in Statistical Physics*" (13-18 August 2005, Kolimbari - Crete, Greece) - Talk presentation
- *XCI Congresso Nazionale S.I.F.* - Dipartimento di Fisica e Astronomia dell'Università di Catania 26 Settembre - 1 October 2005 – Presentazione di un Poster
- Invited talk to the International symposium in honour of Alberto Robledo "Nonlinearity, nonequilibrium and complexity: Questions and perspectives in statistical physics"; Tepoztlan, Mexico – 28/11/05- 02/12/05
- London Mathematical Society, "*Durham Symposium on Dynamical Systems and Statistical Mechanics*"; Durham, UK – 3-7 July 2006 - Talk presentation
- International Conference on "*Ettore Majorana's legacy and the Physics of the XXI century*" to commemorate the centennial of Majorana's birth, Dipartimento di Fisica e Astronomia Università di Catania – 5-6 October 2006
- Invited talk all'International Conference on "*Complexity, Metastability and Nonextensivity - Catania Next07*", satellite conference of StatPhys23, 1-5 July 2007 - Catania, Italy
- International Conference STATPHYS23 on statistical physics, 9-13 July 2007, Genova, Italy Presentazione di un poster
- Invited talk all'International Workshop on "*Ecological Complex Systems: Stochastic Dynamics and Patterns*", 22-26 July 2007, Città del Mare - Terrasini (Palermo), Italy
- WIVACE 2007 - Workshop Italiano di Vita Artificiale e Computazione Evolutiva, 5-7 Settembre 2007, Sampieri (Ragusa), Italy
- The 10th Experimental Chaos Conference - 3-6 June 2008 - Dipartimento di Ingegneria dell'Università di Catania - Presentazione di un poster
- Sigma-Phi 2008 - International Conference on Statistical Physics - 14-18 July 2008 Kolimbari, Creta - Talk presentation
- Invited talk to the International Conference on Nonextensive Statistical Mechanics - NEXT08, 27-31 October 2008, Iguacu, Brazil
- Physcon 2009 - 4th International Scientific Conference on Physics and Control - 1-4 Settembre 2009 - Facoltà di Ingegneria dell'Università di Catania - Talk presentation
- TIC-STH 2009 - IEEE Toronto International Conference - Science and Technology for Humanity - 26-27 Settembre 2009 - Toronto, Canada - Talk presentation
- Co-Direction of the LIPARI INTERNATIONAL SCHOOL "Complex Systems Series" - Lipari, Italy, 3-10 July 2010
- STATPHYS 24 - International Conference on Statistical Physics - Convention Centre, Cairns, Australia, 19-23 July 2010 - Presentazione di un poster
- Invited talk a Uniwinding Complexity - Statistical Physics Perspectives on Complex Systems and Complex Materials - Port Douglas, Australia - 24-26 July 2010
- Invited talk at Harvard University (Boston) for the "IG NOBEL PRIZE 2010 CEREMONY" – 30 September 2010 <http://www.pluchino.it/ignobel.html>
- Invited talk at M.I.T. (Boston) as IG NOBEL PRIZE 2010 winner – 1 October 2010
- Co-Direction of the LIPARI INTERNATIONAL SCHOOL "Complex Systems Series" - Lipari, Italy, 9-16 July 2011
- LIPARI INTERNATIONAL SCHOOL "Computational Social Science: text and decisions" - Lipari, Italy, 17-23 July 2011 – Tutorial presentation on NetLogo environment
- ECCS'11 - European Conference on Complex Systems - Vienna 12-16 Settembre 2011 - Talk presentation
- International collaboration with Prof.Constantino Tsallis for a research project on Non Extensive Statistical

- Invited talk at Max-Planck Insitut fur Polymerforschung - Mainz, Germania – 03 July 2012
- Co-Direction of the LIPARI INTERNATIONAL SCHOOL "Complex Systems Series" - Lipari, Italy, 14-21 July 2012
- LIPARI INTERNATIONAL SCHOOL "Computational Social Science: text and decisions" - Lipari, Italy, 21-28 July 2012 – Invited Tutorial on the software environment for agent-based simulations NetLogo
- Invited talk at International Symposium on Tsallis Entropy and Its Applications press oil Murray Gell-Mann Institute of Complexity Science – Central China University, Wuhan, China – 16-18 October 2012
- Co-Direction of the LIPARI INTERNATIONAL SCHOOL "Complex Systems Series" - Lipari, Italy, 6-13 July 2013
- ECCS'13 - European Conference on Complex Systems - Barcellona 16-20 September 2013 - Talk presentation
- Invited talk to the Conference on "Complex System: Foundation and Applications", celebration of 70 years of Prof.C.Tsallis – 28 October – 1 November 2013- CBPF (Centro Brasileiro de Pesquisas Fisicas) - Rio de Janeiro (Brazil)
- 2013-2014 – Staff of the Jean Monnet European Project "New Strategies for Democratic Development and Political Integration in Europe" coordinated by Dipartimento di Giurisprudenza dell'Università di Catania (<http://www.news-eu.org>), with a talk about "Deputati Indipendenti ed Efficienza del Parlamento" – 29/11/2013
- Invited talk at IPSA World Congress 2014, Panel RC06.461: Sortition as a democratic procedure, 19-24 July 2014 - Montreal, Canada
- Co-Direction of the LIPARI INTERNATIONAL SCHOOL "Complex Systems Series" - Lipari, Italy, 27 July – 2 August 2014
- Collaborazione internazionale con il Prof.Constantino Tsallis per un progetto di ricerca su Non Extensive Statistical Mechanics al CBPF (Centro Brasileiro de Pesquisas Fisicas), Rio de Janeiro from 22/11/2014 to 29/11/2014
- IC2S2 2015 – International Conference on Computational Social Systems – 08-11 June 2015 Helsinki, Finlandia - Talk presentation
- Co-Direction of the LIPARI INTERNATIONAL SCHOOL "Complex Systems Series" - Lipari, Italy, 12-18 July 2015
- Invited talk to the International School of Complexity "New trends in statistical mecvnical foundation of complexity: applications in high energy and plasma physics, long-range interactions, edge of chaos and elsewhere", 27 July – 03 August 2015 – Erice, Italy
- Invited talk to the Conference "Biophys '15 – From physics to biology and beyond", 9-11 Settembre 2015 – Florence, Italy
- Invited talk at the International Workshop on "Foundations of complexity: Nonadditive entropies and Nonextensive statistical mechanics", 04-30 October 2015 - Rio de Janeiro (Brazil)
- Invited talk at the XVI International "Disordered Systems: Theory and its Applications" Symposium, 25-27 May 2016, Istanbul, Turkey
- IC2S2 2016 – International Conference on Computational Social Science – 24-26 June 2016 Chicago, USA - Talk presentation
- Co-Direction of the LIPARI INTERNATIONAL SCHOOL "Computational Complex and Social Sciences" - Lipari, Italy, 10-17 July 2016
- Invited talk to the Conference "Biophys & Pieces '16", 26-28 Settembre 2016 – Bari, Italy
- Invited talk at "IgNobel Spring Tour Show 2017", March 21, 2017 - EPFL Forum Rolex, Lausanne (Switzerland)
- Membro dell'Organizing Committee del "IgNobel Spring Tour Show 2017", April 6, 2017 - Department of Physics, Catania (Italy)
- Membro dell'Organizing Committee della "Summer Solstice 2017 – 9th International Conference on Discrete Models of Complex Systems", June 21-23 2017, Catania (Italy)
- Co-Direction of the LIPARI INTERNATIONAL SCHOOL "Computational Complex and Social Sciences" - Lipari, Italy, 16-22 July 2017

- Invited talk at "IgNobel Spring Tour Show 2017", EPFL Forum Rolex, Lausanne (Switzerland) March 21, 2017
- CCS 2017 – International Conference on Complex Systems – September 17-22 2017, Cancun (Mexico) - Talk presentation
- AUTOMATA 2018 – The 24th Annual International Workshop on Cellular Automata and Discrete Complex Systems – June 20-22 2018 - Ghent University (Belgium) - Talk Presentation
- Invited talk at "Festival della Complessità 2018" – June 30 2018 – Ragusa Ibla (Italy)
- Co-Direction of the LIPARI INTERNATIONAL SCHOOL "Computational Complex and Social Sciences" - Lipari, Italy, 19-25 July 2018
- CCS 2018 – International Conference on Complex Systems – September 23-28 2018, Thessaloniki (Greece) - Talk presentation
- Invited talk at CCS 2018 Satellite meeting on "Questions and perspectives in understanding complexity via nonlinearity and information theory" - September 26 2018, Thessaloniki (Greece)

Libri e Pubblicazioni Scientifiche

UNDER REVIEW 2018

M.LE PIRA, N.GIUFFRIDA, G.INTURRI, M.IGNACCOLO, A.PLUCHINO, A.RAPISARDA. Exploring demand responsive shared transport services under different vehicle dispatching rules via agent-based simulations.

A.GRECO, A.PLUCHINO, L. BARBAROSSA, I.CALIO', F.MARTINICO, A.RAPISARDA. A simplified model based on self-organized criticality framework for the seismic assessment of urban areas.

A.GRECO, F.CANNIZZARO, A.PLUCHINO. Limit analysis of planar frame structure under seismic load through immune algorithms.

A.GRECO, A.PLUCHINO, F.CANNIZZARO. An improved Ant Colony Optimization algorithm for limit analysis of frame structures.

A.GRECO, A.PLUCHINO, S.CADDEMI, I.CALIO', F.CANNIZZARO. On profile reconstruction of Eulero-Bernoulli beams by means of energy based genetic algorithms.

CASERTA M., PLUCHINO A., RAPISARDA A., SPAGANO S. The fallacy of representative democracy and the random selection of legislators. arXiv:1712.04194 [physics.soc-ph]

IN PRESS 2018

A.PLUCHINO, A.E.BIONDO, A.RAPISARDA. Talent vs Luck: the role of randomness in success and failure. Advances in Complex Systems. arXiv:1802.07068 [physics.soc-ph]

Supplementary Material: <http://www.pluchino.it/talent-vs-luck-ita.html>

Altmetric Score: <https://www.altmetric.com/details/33451664>

M.CONSOLI, A.PLUCHINO. Cosmic Microwave Background and the issue of a fundamental preferred frame. European Physical Journal Plus. arXiv:1801.03775 [physics.gen-ph]

M.CONSOLI, A.PLUCHINO. Michelson-Morley experiments: an enigma for physics and history of science. World Scientific

PUBLISHED

A.FICHERA, A.PLUCHINO, R.VOLPE (2018). A multi-layer agent-based model for the analysis of energy distribution networks in urban areas. Physica A 508, 710-725. arXiv:1705.09803 [physics.soc-ph]

A.E.BIONDO, A.PLUCHINO, A.RAPISARDA (2018). Modelling surveys effects in political competitions. Physica A 503, 714-726. arXiv:1711.02765 [physics.soc-ph]

A.GRECO, F.CANNIZZARO, A.PLUCHINO (2018). Automatic evaluation of plastic collapse conditions for planar frames with vertical irregularities. Engineering with Computers, <https://doi.org/10.1007/s00366-018-0583-9>

A.GRECO, D.D'URSO, F.CANNIZZARO, A.PLUCHINO (2018). Damage identification on spatial Timoshenko arches by means of

- A.GRECO, A.PLUCHINO, F.CANNIZZARO, S.CADDEMI, I.CALIO' (2018). Closed-form solution based Genetic Algorithm Software: Application to multiple cracks detection on beam structures by static tests. *Applied Soft Computing* 64, pp. 35-48. arXiv:1701.06432.
- M.LE PIRA, E.MARCUCCI, V.GATTA, G.INTURRI, M.IGNACCOLO, A.PLUCHINO (2017). Integrating discrete choice models and agent-based models for ex-ante evaluation of stakeholder policy acceptability in urban freight transport. *Research in Transportation Economics* 64, 13-25.
- A.GRECO, F.CANNIZZARO, A.PLUCHINO (2017). Seismic collapse prediction of frame structures by means of genetic algorithms *Engineering Structures* 143, pp. 152-168. arXiv:1609.09411 [physics.soc-ph]
- M.LE PIRA, E.MARCUCCI, V.GATTA, M.IGNACCOLO, G.INTURRI, A.PLUCHINO (2017). Towards a decision-support procedure to foster stakeholder involvement and acceptability of urban freight transport policies. *Eur. Transp. Res. Rev.* 9:54, DOI 10.1007/s12544-017-0268-2
- A.PLUCHINO (2017). Disuguaglianze e crescita economica: pensiero globale e responsabilità individuale. In "Economia ed Etica: il dialogo necessario per il bene della Casa Comune" a cura di Francesco Brancato, Quaderni di Synaxis n.7 - Studio Teologico S.Paolo Catania
- E.MARCUCCI, M.LE PIRA, V.GATTA, G.INTURRI, M.IGNACCOLO, A.PLUCHINO (2017). Simulating participatory urban freight transport policy-making: accounting for heterogeneous stakeholders' preferences and interaction effects. *Transportation Research Part E-Logistics and Transportation Review*. Vol.103, Pages 69-86 doi.org/10.1016/j.tre.2017.04.006
- A.PLUCHINO, A.RAPISARDA, C.GAROFALO (2017). Abbiamo vinto l'IG Nobel, con il principio di Peter. *Scienza, Caso e Humor*. MALCOR'D Edizione - ISBN 9788897909323
- M.LE PIRA, G.INTURRI, M.IGNACCOLO, A.PLUCHINO (2017). Modelling consensus building in Delphi practices for participated transport planning. *Transportation Research Procedia*, Vol. 25, 3729-3739. <https://doi.org/10.1016/j.trpro.2017.05.226>. arXiv:1511.06127 [physics.soc-ph]
- M.LE PIRA, G.INTURRI, M.IGNACCOLO, A.PLUCHINO (2017). Dealing with the complexity of stakeholder interaction in participatory transport planning. in "Advanced Concepts, Methodologies and Technologies for Transportation And Logistics", Springer-Verlag Berlin Heidelberg. DOI 10.1007/978-3-319-57105-8
- A.E.BIONDO, A.PLUCHINO, A.RAPISARDA (2017). A multilayer approach for price dynamics in financial markets. *Eur. Phys. J. Special Topics* 226, 477-488
- A.E.BIONDO, A.PLUCHINO, A.RAPISARDA (2017). Informative Contagion Dynamics in a Multilayer Network Model of Financial Markets. *Italian Economic Journal*, Springer. DOI 10.1007/s40797-017-0052-4
- M.LE PIRA, G.INTURRI, M.IGNACCOLO, A.PLUCHINO, A.RAPISARDA (2017). Finding shared decisions in stakeholder networks: an agent-based approach. *Physica A* 466, 277-287
- A.E.BIONDO, A.PLUCHINO, A.RAPISARDA (2016). A multilayer model of order book dynamics. *Journal of Network Theory in Finance* 2(3), 1-16 DOI: 10.21314/JNTF.2016.021
- A.PLUCHINO (2016). 10 Pillole di Complessità: una guida per capire la rivoluzione scientifica in corso. MALCOR'D Edizione - ISBN 978-88-979-0926-2
- M.LE PIRA, G.INTURRI, M.IGNACCOLO, A.PLUCHINO, A.RAPISARDA (2016). Modelling stakeholder participation in transport planning. *Case Studies on Transport Policy*, Volume 4, Issue 3, Pages 230-238
- M.CONSOLE, A.PLUCHINO (2016). The Idea of a Stochastic Space-Time: Theory and Experiments. In "Beyond Peaceful Coexistence: the Emergence of Space, Time and Quantum" World Scientific ISBN: 978-1-78326-831-3
- A.E.BIONDO, A.PLUCHINO, A.RAPISARDA (2016). Order Book, Financial Markets and Self-Organized Criticality. *CHAOS, SOLITONS AND FRACTALS*, Chaos, Solitons and Fractals 88, 196-208, doi:10.1016/j.chaos.2016.03.001
- M.CONSOLE, A.PLUCHINO, A.RAPISARDA (2016). Cosmic Background Radiation and "ether-drift" experiments. *EUROPHYSICS LETTERS*, 113 19001
Supplementary Material: <https://phys.org/news/2016-02-year-old-ether-cosmological-temperature-gradient.html>
- A.E.BIONDO, A.GIARLOTTA, A.PLUCHINO, A.RAPISARDA (2016). Perfect Information vs Random Investigation: Safety Guidelines for a Consumer in the Jungle of Product Differentiation. *PLoS ONE* 11(1): e0146389 doi:10.1371/journal.pone.0146389
- M.CONSOLE, A.PLUCHINO (2015). Il Vuoto: un enigma tra fisica e metafisica. ARACNE Editrice - ISBN 978-88-548-8787-0

- M.LE PIRA, G.INTURRI, M.IGNACCOLO, A.PLUCHINO (2015). Analysis of AHP Methods and the Pairwise Majority Rule (PMR) for Collective Preference Rankings of Sustainable Mobility Solutions. TRANSPORTATION RESEARCH PROCEDIA, Volume 10c, Pages 852-862
- A.PLUCHINO (2015). La Firma della Complessità: una passeggiata al margine del caos. MALCOR'D Edizione - ISBN 978-88-979-0917-0
Supplementary Material: <http://www.pluchino.it/firma-della-complessita.html>
- A.E.BIONDO, A.PLUCHINO, A.RAPISARDA (2015). Modelling Financial Markets by Self-Organized Criticality. PHYSICAL REVIEW E 92, 042814
- M.LE PIRA, G.INTURRI, M.IGNACCOLO, A.PLUCHINO, A.RAPISARDA (2015). Simulating opinion dynamics on Stakeholders' networks through agent-based modelling for collective transport decisions. PROCEDIA COMPUTER SCIENCE, Volume 52, Pages 884-889
- CONSOLI M., PLUCHINO A., RAPISARDA A., TUDISCO S. (2014). The vacuum as a form of turbulent fluid: motivations, experiments, implications. PHYSICA. A, vol. 394, p. 61-73, ISSN: 0378-4371, doi: 10.1016/j.physa.2013.09.070 2.
- BIONDO A. E., PLUCHINO A., RAPISARDA A. (2014). Micro and macro benefits of random investments in financial markets. CONTEMPORARY PHYSICS, Vol.55 Issue 4 DOI: 10.1080/00107514.2014.929308
- D.A.ZAPPALA', A.PLUCHINO, A.RAPISARDA (2014). Selective altruism in collective games. PHYSICA A 410, 496-512
- M.CONSOLI M. AND A.PLUCHINO (2014). Gravity as an emergent phenomenon: experimental signatures. arXiv: 1311.4301 [gr-qc]
- PLUCHINO A., GAROFALO C., INTURRI G., RAPISARDA A., IGNACCOLO M. (2014). Agent-based simulation of pedestrian behaviour in closed spaces: a museum case study. JASSS, vol. 1, 17, ISSN: 1460-7425 3.
- PLUCHINO A., RAPISARDA A., TSALLIS C. (2013). Noise, synchrony, and correlations at the edge of chaos. PHYSICAL REVIEW E, STATISTICAL, NONLINEAR, AND SOFT MATTER PHYSICS, vol. 87, p. 022910-1-022910-5, ISSN: 1539-3755, doi: 10.1103/PhysRevE.87.022910
- BIONDO A. E., PLUCHINO A., RAPISARDA A., HELBING D. (2013). Are random trading strategies more successful than technical ones?. PLOS ONE, vol. 8, ISSN: 1932-6203, doi: 10.1371/journal.pone.0068344 4.
- CONSOLI M., MATHESON C., PLUCHINO A. (2013). The classical ether-drift experiments: a modern re-interpretation, EUR. PHYS. J. PLUS (2013) 128: 71 - DOI 10.1140/epjp/i2013-13071-7
- BIONDO A. E., PLUCHINO A., RAPISARDA A., HELBING D. (2013). Reducing financial avalanches by random investments. PHYSICAL REVIEW E, STATISTICAL, NONLINEAR, AND SOFT MATTER PHYSICS, vol. 88, ISSN: 1539-3755, doi: <http://dx.doi.org/10.1103/PhysRevE.88.062814>
Supplementary Material: http://www.pluchino.it/financial-markets_ita.html
- PLUCHINO A., RAPISARDA A., GAROFALO C., SPAGANO S., CASERTA M. (2013). L'efficienza del caso. LE SCIENZE, vol. 533, ISSN: 0036-8083
- BIONDO A.E., PLUCHINO A., RAPISARDA A. (2013). Return Migration After Brain Drain: An Agent Based Simulation Approach. JASSS, vol. 16, ISSN: 1460-7425
- BIONDO A. E., PLUCHINO A., RAPISARDA A. (2013). The beneficial role of random strategies in social and financial systems. JOURNAL OF STATISTICAL PHYSICS, vol. 151, p. 607-622, ISSN: 0022-4715, doi: 10.1007/s10955-013-0691-2
- CASERTA M., GAROFALO C., PLUCHINO A., RAPISARDA A., SPAGANO S. (2012). Democrazia a sorte. Ovvero la sorte della democrazia. MALCOR D' EDIZIONE - ISBN: 9788897909019
- A.PLUCHINO, A.RAPISARDA, C.GAROFALO (2012). Reti e Gerarchie: meritocrazia ed efficienza. In "Sistemi, Modelli, Organizzazioni. Management e Complessità" (a cura di Ignazio Licata) ED. CORISCO- ISBN 978-88-98138-02-9
- D.MASCALI, S.TUDISCO, N.GAMBINO, A.PLUCHINO, A.ANZALONE, F.MUSUMECI, A.RAPISARDA, A.SPITALERI (2012) Prompt electrons driving ion acceleration and formation of a two temperatures plasma in nanosecond laser-ablation domain. EUROPHYSICS LETTERS, 100 45003
- A.PLUCHINO, C.GAROFALO, A.RAPISARDA, S.SPAGANO, M.CASERTA (2011). Accidental Politicians: How Randomly Selected Legislators Can Improve Parliament Efficiency. PHYSICA A 390, 3944-3954
Supplementary Material: <http://www.pluchino.it/parliament-ita.html>

- A.PLUCHINO, A.RAPISARDA, C.GAROFALO (2011). Efficient Promotion Strategies in Hierarchical Organization. *PHYSICA A* 390, 3496-3511
- R.LE MOLI, A.PLUCHINO, V.MUSCIA, C.REGALBUTO, B.LUCIANI, S.SQUATRITO, R.VIGNERI (2011). Graves' orbitopathy: extraocular muscle/fat ratio in the orbit is positively related to the Clinical Activity Score (CAS). *EUROPEAN JOURNAL OF OPHTHALMOLOGY*
pii: 09D05CE9-5CD5-4465-AA46-5791177510F5. doi: 10.5301/ejo.5000018
- M.CONSOLO, A.PLUCHINO, A.RAPISARDA (2011). Basic Randomness of Nature and Ether-drift Experiments. *CHAOS, SOLITONS & FRACTALS* 44 (2011) 1089-1099
- A.PLUCHINO, A.RAPISARDA, C.GAROFALO (2010). The Peter Principle Revisited: A Computational Study. *PHYSICA A* 389, 467-472. Premiato con l' "Ig-Nobel Prize 2010 for Management" presso l'Università di Harvard, Boston (USA) il 30/09/2010
Supplementary Material:<http://www.pluchino.it/peter-links.html>
Best Altmetric Score for Physica A: <https://www.altmetric.com/details/1043053?src=bookmarklet>
- A.PLUCHINO, A.RAPISARDA, C.GAROFALO (2010). Le Insidie del Principio di Peter - Strategie per evitare i rischi di una meritocrazia ingenua. *PSICOLOGIA CONTEMPORANEA*, May-June 2010
- A.PLUCHINO, A.RAPISARDA, C.TSALLIS (2009). On "Ergodicity and Central Limit Theorem in Systems with Long-Range Interactions". *EUROPHYSICS LETTERS*. vol. 85, pp. 60006.
- G.MIRITELLO, A.PLUCHINO, A.RAPISARDA (2009). Central Limit Behavior in the Kuramoto model at the "Edge of Chaos". *PHYSICA A* 388, 4818-4826.
- G.MIRITELLO, A.PLUCHINO, A.RAPISARDA (2009). Phase Transitions and Chaos in Long-Range Models of Coupled Oscillators. *EUROPHYSICS LETTERS*. vol. 85, pp. 10007 ISSN: 0295-5075.
- A.PLUCHINO, A.RAPISARDA, C.TSALLIS. (2008). A closer look at the indications of q-generalized Central Limit Theorem behavior in quasi-stationary states of the HMF model. *PHYSICA. A*. vol. 387, pp. 3121-3128 ISSN: 0378-4371.
- A.PLUCHINO, A.RAPISARDA, V.LATORA. (2008). Communities recognition in the Chesapeake Bay ecosystem by dynamical clustering algorithms based on different oscillator systems. *THE EUROPEAN PHYSICAL JOURNAL. B, CONDENSED MATTER PHYSICS*. vol. 65, pp. 395-402 ISSN: 1434-6028.
- S.PRIVITERA, S. TUDISCO, L.LANZANÒ, F.MUSUMECI, A.PLUCHINO, A.SCORDINO ET AL. (2008). Single Photon Avalanche Diodes: Towards the Large Bidimensional Arrays. *SENSORS (on line)*. vol. 8, pp. 4636-4655 ISSN: 1424-8220.
- F.CARUSO, A.PLUCHINO, V.LATORA, S.VINCIGUERRA, A.RAPISARDA. (2007). Analysis of Self-Organized Criticality in the Olami-Feder-Christensen model and in real earthquakes. *PHYSICAL REVIEW E, STATISTICAL, NONLINEAR, AND SOFT MATTER PHYSICS*. vol. 75, pp. 055101-055105 ISSN: 1539-3755. Rapid Communication.
- C.TSALLIS, A.RAPISARDA, A.PLUCHINO, E.P.BORGES. (2007). On the non-Boltzmannian nature of quasi-stationary states in long-range interacting systems. *PHYSICA. A*. vol. 341, pp. 143-147 ISSN: 0378-4371.
- S.BOCCALETTI, M.IVANCHENKO, V.LATORA, A.PLUCHINO, A.RAPISARDA. (2007). Detecting Complex Networks Modularity by Dynamical Clustering. *PHYSICAL REVIEW E, STATISTICAL, NONLINEAR, AND SOFT MATTER PHYSICS*. vol. 75, pp. 045102-045107 ISSN: 1539-3755. Rapid Communication.
- A.PLUCHINO, A.RAPISARDA, C.TSALLIS. (2007). Nonergodicity and Central Limit Behavior for Long-range Hamiltonians. *EUROPHYSICS LETTERS*. vol. 80, pp. 26002-26008 ISSN: 0295-5075.
- F.CARUSO, A.PLUCHINO, V.LATORA, A.RAPISARDA, B.TADIC (2006). Olami-Feder-Christensen model on different networks. *THE EUROPEAN PHYSICAL JOURNAL. B, CONDENSED MATTER PHYSICS*. vol. 50, pp. 243-247 ISSN: 1434-6028.
- A.PLUCHINO, S.BOCCALETTI, V.LATORA, A.RAPISARDA (2006). Opinion dynamics and synchronization in a network of scientific collaborations. *PHYSICA. A*. vol. 372, pp. 316-325 ISSN: 0378-4371.
- A.PLUCHINO, V.LATORA, A.RAPISARDA (2006). Effective spin-glass Hamiltonian for the anomalous dynamics of the HMF model. *PHYSICA. A*. vol. 370, pp. 573-584 ISSN: 0378-4371.
- A.PLUCHINO, V.LATORA, A.RAPISARDA (2006). Compromise and Synchronization in Opinion Dynamics. *THE EUROPEAN PHYSICAL JOURNAL. B, CONDENSED MATTER PHYSICS*. vol. 50, pp. 169-176 ISSN: 1434-6028.
- A.PLUCHINO, A.RAPISARDA (2006). Metastability in the Hamiltonian Mean Field model and Kuramoto model. *PHYSICA. A*. vol. 365, pp. 184-189 ISSN: 0378-4371.

A.PLUCHINO, A.RAPISARDA (2006). Glassy Dynamics and Nonextensive effects in the HMF model: the importance of initial conditions. PROGRESS OF THEORETICAL PHYSICS SUPPLEMENT. vol. 162, pp. 18-28 ISSN: 0375-9687.

A.RAPISARDA, A.PLUCHINO (2006). Reply to Comment by Dauxois, Bouchet and Ruffo on "Nonextensive thermodynamics and glassy behavior in Hamiltonian systems". EUROPHYSICS NEWS. vol. 37, pp. 10-11 ISSN: 0531-7479.

A.RAPISARDA, A.PLUCHINO (2005). NONEXTENSIVE THERMODYNAMICS AND GLASSY BEHAVIOUR. EUROPHYSICS NEWS. vol. 36, pp. 202-206 ISSN: 0531-7479.

S.FORTUNATO, V.LATORA, A.PLUCHINO, A.RAPISARDA (2005). Vector Opinion Dynamics in a Bounded Confidence Consensus Model. INTERNATIONAL JOURNAL OF MODERN PHYSICS C. vol. 16, pp. 1535-1551 ISSN: 0129-1831.

A.PLUCHINO, G.ANDRONICO, A.RAPISARDA (2005). A Monte Carlo investigation of the Hamiltonian Mean Field model. PHYSICA. A. vol. 349, pp. 143-154 ISSN: 0378-4371.

A.PLUCHINO, V.LATORA, A.RAPISARDA (2005). Changing Opinions in a Changing World: a New Perspective in Sociophysics. INTERNATIONAL JOURNAL OF MODERN PHYSICS C. vol. 16, pp. 515-531 ISSN: 0129-1831.

A.PLUCHINO, V.LATORA, A.RAPISARDA (2004). Dynamics and Thermodynamics of a model with long-range interactions. CONTINUUM MECHANICS AND THERMODYNAMICS. vol. 16, pp. 245-255 ISSN: 0935-1175.

A.PLUCHINO, V.LATORA, A.RAPISARDA (2004). Dynamical anomalies and the role of initial conditions in the HMF model. PHYSICA. A. vol. 338, pp. 60-67 ISSN: 0378-4371.

A.PLUCHINO, V.LATORA, A.RAPISARDA (2004). Glassy dynamics in the HMF model. PHYSICA. A. vol. 340, pp. 187-195 ISSN: 0378-4371.

A.PLUCHINO, V.LATORA, A.RAPISARDA (2004). Metastable states, anomalous distributions and correlations in the HMF model. PHYSICA D-NONLINEAR PHENOMENA. vol. 193, pp. 315-328 ISSN: 0167-2789.

A.PLUCHINO, V.LATORA, A.RAPISARDA (2004). Glassy phase in the Hamiltonian Mean Field model. PHYSICAL REVIEW E, STATISTICAL, NONLINEAR, AND SOFT MATTER PHYSICS. vol. 69, pp. 056113-056116 ISSN: 1539-3755.

Proceedings di Conferences o Progetti

M.CONSOLE, A.PLUCHINO (2018). The classical Michelson-Morely experiments: a new solution to an old problem. Atti dell'Accademia Peloritana dei Pericolanti. Vol.96 No. S1 A2 (2018) ISSN 1825-1242

M.CONSOLE, A.PLUCHINO (2016). The classical ether-drift experiments: an enigma for physics and history of science. Società Italiana degli Storici della Fisica e dell'Astronomia: Atti del XXXIII Convegno annuale / Proceedings of the 33rd Annual Conference (2016) ISBN 9788869520488

M.CASERTA, C.GAROFALO, A.PLUCHINO, A.RAPISARDA, S.SPAGANO (2014). Modelli matematici di Parlamento e Democrazia partecipativa. ARACNE EDITRICE, ISBN 978-88-548-7425-1, pagg. 99-110.

M.CONSOLE M. AND A.PLUCHINO (2014). A physical random signal in ether-drift experiments. PROCEEDINGS OF THE "13TH MARCEL GROSSMAN MEETING MG13" - WORLD SCIENTIFIC, SINGAPORE

M.LE PIRA, M.IGNACCOLO, G.INTURRI, C.GAROFALO, A.PLUCHINO, A.RAPISARDA (2013). Agent-Based Modelling of Stakeholder Interaction in Transport Decisions. SELECTED PROCEEDINGS WCTR RIO - ISBN: 978-85-285-0232-9

S. CAPRÌ, C.GAROFALO, M.IGNACCOLO, G.INTURRI, A.PLUCHINO, A.RAPISARDA, S.TUDISCO (2009). Agent-based simulation of pedestrian behaviour. PROCEEDINGS XVI INTERNATIONAL CONFERENCE SIDT 2009, MAGGIOLI EDITORE, P.79-84

D.BUSCEMA, M.IGNACCOLO, G.INTURRI, A.PLUCHINO, A.RAPISARDA, C.SANTORO, S.TUDISCO (2009). The impact of real time information on transport network routing through Intelligent Agent Based Simulation. PROCEEDINGS TO "TIC-STH" SYMPOSIUM ON HUMAN FACTORS AND ERGONOMICS. IEEE Xplore - C.N. CFP0956G CDR - ISBN: 978-1-4244-3878-5, p.72

F.CAMILLEN, S. CAPRÌ, C.GAROFALO, M.IGNACCOLO, G.INTURRI, A.PLUCHINO, A.RAPISARDA, S.TUDISCO (2009). Multi agent simulation of pedestrian behavior in closed spatial environment. PROCEEDINGS TO "TIC-SENCS" SYMPOSIUM ON ENGINEERED AND NATURAL COMPLEX SYSTEMS-MODELING, SIMULATION AND ANALYSIS. IEEE Xplore - C.N. CFP0956G CDR - ISBN: 978-1-4244-3878-5, p.375

- S. TUDISCO, S.PRIVITERA, L.LANZANÒ, F.MUSUMECI, PLUCHINO A., A.SCORDINO ET AL. (2008). The new generation of SPAD: Single-Photon Avalanche Diodes arrays. In: *Il Nuovo Cimento* - DOI 10.1393/ncc/i2008-10266-8 - Online First.
- F.CARUSO, PLUCHINO A., V.LATORA, A.RAPISARDA, S.VINCIGUERRA. (2007). Self-Organized Criticality and earthquakes. In: *American Institute of Physics conference Proceedings*. (vol. 965, pp. 281-287).
- A.PLUCHINO, A.RAPISARDA (2007). Anomalous diffusion and quasistationarity in the HMF model. In: *American Institute of Physics conference proceedings*. (vol. 965, pp. 129-135).
- A.PLUCHINO, A.RAPISARDA (2007). Nonergodicity and central limit behavior for systems with long-range interactions. *International SPIE Conference on Complex Systems*. Canberra, Australia. 5-7 December 2007. (pp. 124-130).
- PLUCHINO A., V.LATORA, A.RAPISARDA, S.BOCCALETTI. (2007). Modules identification by a Dynamical Clustering algorithm based on chaotic Rössler oscillators. In: *American Institute of Physics conference proceedings 965 p.323*. (vol. 965, pp. 323-329).
- PLUCHINO A., V.LATORA, A.RAPISARDA. (2004). Metastability and anomalous behavior in the HMF Model: connections to nonextensive thermodynamics and glassy dynamics. In: *Proceedings of the International conference "Complexity, Metastability and Nonextensivity"*. International conference. Erice, Sicily. July 20-26 2004. (pp. 234-240). : World Scientific.