

Persona Information

Franco Bagnoli

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Sex M | [redacted] | Nationality Italian

Jobs

Since 1/10/2018: Associate Professor of Theoretical Matter Physics, department of Physics and Astronomy, University of Florence.
 1/1/2013-30/9/2018: Permanent Researcher (Aggregate Professor) in Theoretical Matter Physics, department of Physics and Astronomy, University of Florence.
 1/11/2001-31/12/2012: Permanent Researcher in Physics, department of Energy, University of Florence.
 4/2/1991-31/10/2001: System manager, department of Applied Mathematics, University of Florence.
 1986-1990: Software consultant (private).

Formation

16/6/1997 PhD in Physics at the University Pierre et Marie Curie (Paris 6) in Paris, supervised by [redacted]
 19/5/1994 Equivalence with Diplome d'Etude Approfondi (DEA) at the University Pierre et Marie Curie (Paris 6) in Paris.
 13/7/1989 Master degree in Physics, University of Florence at the Florence University (Italy), supervised by [redacted]

Management

Italian coordinator of the INFN projects PIECES (till 2016) and PlexNet (2017-2020, 5 sites, 30 researchers). Local coordinator of the project LINCOLN (learning complex networks – 2021).
 Local coordinator of the European projects InSPIRES, EINS, RECOGNITION, SciCafé, SciCafe2.0.
 Coordinator of the project of the Italian Ministry for Research and Teaching “Network of Science Cafés” and “Let’s play with mathematics and physics”.
 Coordinator of the project “Modeling landslide triggering” funded from 2010 to 2016 by the Ente Cassa di Risparmio.
 President of the Science Café Association in Florence.

Interests

Phase transitions in discrete systems.
 Chaos, synchronization and control of discrete dynamical systems.
 Dynamics on networks.
 Theory of evolution.
 Cognitive processes and human heuristics in virtual interactions.
 Participative processes, citizen science.
 Popularization of science, theory of learning and teaching, education outside classroom.

Publications

Author of 274 publications on Google Scholar (1855 citations, h-index: 22), 134 on Scopus (Author ID: 7005226558, 1021 citations, h-index: 15), 153 on Web of Science (ResearcherID: K-6904-2015, 927 citations, h-index: 15)
 orcid-id:0000-0002-6293-0305

Latest publications:

Bagnoli, F; Rechtman, R (2020). Damage Spreading, Chaos and Regional Synchronization of a Probabilistic Cellular Automaton. JOURNAL OF CELLULAR AUTOMATA, vol. 15, pp. 113-129, ISSN:1557-5969

Dridi S.; Yacoubi S.E.; Bagnoli F. (2020). Boundary Regional Controllability of Linear Boolean Cellular Automata Using Markov Chain. In: Zerrik E., Melliani S., Castillo O., Recent Advances in Modeling, Analysis and Systems Control: Theoretical Aspects and Applications. Studies in Systems, Decision and Control, pp. 37-48 Springer International Publishing, ISBN:978-3-030-26148-1.
http://dx.doi.org/10.1007/978-3-030-26149-8_4

Pacini G.; Belmonte C.; Bagnoli F. (2020). Science cafes, science shops and the lockdown experience in Florence and Rome. FUTURE INTERNET, vol. 12, pp. 1-11, ISSN:1999-5903
<http://dx.doi.org/10.3390/FI12070115>

Bagnoli, Franco (2020). Impossible interview with William Thomson - Lord Kelvin. IL COLLE DI GALILEO, vol. 9, pp. 49-63, ISSN:2281-7727 <http://dx.doi.org/10.36253/CDG-12065>

Baldi A.; Bagnoli F. (2020). Intransitiveness: From games to random walks. FUTURE INTERNET, vol. 12, pp. 1-10, ISSN:1999-5903 <http://dx.doi.org/10.3390/FI12090151>

Giusfredi M.; Bagnoli F. (2020). From color-avoiding to color-favored percolation in diluted lattices. FUTURE INTERNET, vol. 12, pp. 0-0, ISSN:1999-5903 <http://dx.doi.org/10.3390/FI12080139>

Samira El yacoubi, Franco Bagnoli, Giovanna Pacini (2019). Internet Science. New York: Springer nature, pp. 1-358, 978-3-030-34769-7.

Bagnoli, Franco; Dridi, Sara; El Yacoubi, Samira; Rechtman, Raúl (2019). Optimal and suboptimal regional control of probabilistic cellular automata. NATURAL COMPUTING, pp. 845-853, ISSN:1567-7818 <http://dx.doi.org/10.1007/S11047-019-09763-5>

Bagnoli, Franco; Guarino, Alessio; Pacini, Giovanna (2019). Teaching physics by magic. PHYSICS EDUCATION, vol. 54, pp. 015025-015039, ISSN:0031-9120 <http://dx.doi.org/10.1088/1361-6552/AAED62>

Bagnoli, Franco; Bellini, Emanuele; Massaro, Emanuele; Rechtman, Raúl (2019). Percolation and Internet Science. FUTURE INTERNET, vol. 11, pp. 0-0, ISSN:1999-5903
<http://dx.doi.org/10.3390/FI11020035>

Franco Bagnoli; Beatrice Sassi (2019). LE PRATICHE DI SOSTENIBILITA' DELL'UNIVERSITA' DI FIRENZE. In: Michela Amaboldi, Giovanni Azzone, Enrico Periti. Università Sostenibili, pp. 191-211, Bologna: Il Mulino, ISBN:978-88-15-28442-6.

Dridi, S.; El Yacoubi, S.*; Bagnoli, F.; Fontaine, A. (2019). A graph theory approach for regional controllability of Boolean cellular automata. INTERNATIONAL JOURNAL OF PARALLEL, EMERGENT AND DISTRIBUTED SYSTEMS, pp. 1-15, ISSN:1744-5760
<http://dx.doi.org/10.1080/17445760.2019.1608442>

Guazzini, Andrea; Stefanelli, Federica; Imbimbo, Enrico; Vilone, Daniele; Bagnoli, Franco; Levnajić, Zoran (2019). Humans best judge how much to cooperate when facing hard problems in large groups. SCIENTIFIC REPORTS, vol. 9, pp. 0-8, ISSN:2045-2322 <http://dx.doi.org/10.1038/S41598-019-41773-2>

Guazzini, Andrea; Imbimbo, Enrico; Stefanelli, Federica; Bagnoli, Franco; Venturino, Ezio* (2019). Quantifying fairness to overcome selfishness: A behavioural model to describe the evolution and stabilization of inter-group bias using the Ultimatum Game. MATHEMATICAL BIOSCIENCES AND ENGINEERING, vol. 16, pp. 3718-3733, ISSN:1547-1063 <http://dx.doi.org/10.3934/MBE.2019184>

Dridi S.; Bagnoli F.; El Yacoubi S. (2019). Markov chains approach for regional controllability of deterministic cellular automata, via boundary actions. JOURNAL OF CELLULAR AUTOMATA, vol. 14, pp. 479-498, ISSN:1557-5969

Franco Bagnoli; Giorgio Gronchi (2019). Perché la fisica è così difficile? Why is physics so difficult?. PH, vol. 2, pp. 23-41, ISSN:2240-0559

Arti Franco Bagnoli (2019). Impossible interview with Hugh Everett III. IL COLLE DI GALILEO, vol. 8, pp. 63-71, ISSN:2281-7727 <http://dx.doi.org/10.13128/CDG-10848>

Bellini E.; Bagnoli F.; Ganin A.A.; Linkov I. (2019). Cyber resilience in IoT network: Methodology and example of assessment through epidemic spreading approach. In: 2019 IEEE World Congress on Services, SERVICES 2019, ita, 2019, Institute of Electrical and Electronics Engineers Inc., pp. 72-77, ISBN:978-1-7281-3851-0 <http://dx.doi.org/10.1109/SERVICES.2019.00027>

Baldi A.; Cencetti G.; Fanelli D.; Bagnoli F. (2019). Intransitiveness in Games and Random Walks. In: 6th International Conference on Internet Science, INSCI 2019, fra, 2019, Springer, vol. 11938, pp. 204-216, ISBN:978-3-030-34769-7 http://dx.doi.org/10.1007/978-3-030-34770-3_15

Pacini G.; Bagnoli F. (2019). Science Cafés and Science Shops for Public Engagement. In: 6th International Conference on Internet Science, INSCI 2019, france, 2019, Springer, vol. 11938, pp. 97-108, ISBN:978-3-030-34769-7 http://dx.doi.org/10.1007/978-3-030-34770-3_8

Gresle A.-S.; Cigarini A.; de la Torre Avila L.; Jimeno I.; Bagnoli F.; Dempere H.; Ribera M.; Puertas E.; Perello J.; Pinazo M.J. (2019). An Innovative Online Tool to Self-evaluate and Compare Participatory Research Projects Labelled as Science Shops or Citizen Science. In: 6th International Conference on Internet Science, INSCI 2019, france, 2019, Springer, vol. 11938, pp. 59-72, ISBN:978-3-030-34769-7 http://dx.doi.org/10.1007/978-3-030-34770-3_5

Giusfredi M.; Bagnoli F. (2019). A Self-organized Criticality Method for the Study of Color-Avoiding Percolation. In: 6th International Conference on Internet Science, INSCI 2019, france, 2019, Springer, vol. 11938, pp. 217-226, ISBN:978-3-030-34769-7 http://dx.doi.org/10.1007/978-3-030-34770-3_16

Coppolino Perfumi, Serena; Bagnoli, Franco; Caudek, Corrado; Guazzini, Andrea (2019). *Deindividuation effects on normative and informational social influence within computer-mediated-communication*. COMPUTERS IN HUMAN BEHAVIOR, vol. 92, pp. 230-237 <http://dx.doi.org/10.1016/J.CHB.2018.11.017>

Roberto Ivi; franco bagnoli (2018). Michael Faraday: a virtuous life dedicated to science. SUBSTANTIA, vol. 2, pp. 121-134, ISSN:2532-3997 <http://dx.doi.org/10.13128/SUBSTANTIA-45>

Bagnoli, Franco; Bellini, Emanuele; Massaro, Emanuele; Rechtman, Raúl (2019). *Percolation and Internet Science*. FUTURE INTERNET, vol. 11, pp. 0-0 <http://dx.doi.org/10.3390/FI11020035>

Dridi, S.; El Yacoubi, S.; Bagnoli, F.; Fontaine, A. (2019). *A graph theory approach for regional controllability of Boolean cellular automata*. INTERNATIONAL JOURNAL OF PARALLEL, EMERGENT AND DISTRIBUTED SYSTEMS, pp. 1-15. <http://dx.doi.org/10.1080/17445760.2019.1608442>

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Guazzini, Andrea; Imbimbo, Enrico; Stefanelli, Federica; Bagnoli, Franco; Venturino, Ezio (2019). *Quantifying fairness to overcome selfishness: A behavioural model to describe the evolution and stabilization of inter-group bias using the Ultimatum Game*. MATHEMATICAL BIOSCIENCES AND ENGINEERING, vol. 16, pp. 3718-3733 <http://dx.doi.org/10.3934/MBE.2019184>

Dridi S.; Bagnoli F.; El Yacoubi S. (2019). *Markov chains approach for regional controllability of deterministic cellular automata, via boundary actions*. JOURNAL OF CELLULAR AUTOMATA, vol. 14, pp. 479-498.

Guazzini, Andrea; Stefanelli, Federica; Imbimbo, Enrico; Vilone, Daniele; Bagnoli, Franco; Levnajić, Zoran (2019). *Humans best judge how much to cooperate when facing hard problems in large groups*. SCIENTIFIC REPORTS, vol. 9, pp. 0-8 <http://dx.doi.org/10.1038/S41598-019-41773-2>

Bagnoli, F; Rechtman, R (2020). *Damage Spreading, Chaos and Regional Synchronization of a Probabilistic Cellular Automaton*. JOURNAL OF CELLULAR AUTOMATA, vol. 15, pp. 113-129, ISSN:1557-5969

Articolo su Libro Dridi S.; Yacoubi S.E.; Bagnoli F. (2020). *Boundary Regional Controllability of Linear Boolean Cellular Automata Using Markov Chain*. In: Zerrik E., Melliani S., Castillo O.. *Recent Advances in Modeling, Analysis and Systems Control: Theoretical Aspects and Applications*. Studies in Systems, Decision and Control, pp. 37-48 Springer International Publishing, http://dx.doi.org/10.1007/978-3-030-26149-8_4

Articolo su Rivista Giusfredi M.; Bagnoli F. (2020). *From color-avoiding to color-favored percolation in diluted lattices*. FUTURE INTERNET, vol. 12, pp. 0-0, <http://dx.doi.org/10.3390/FI12080139>

Articolo su Rivista Franco Bagnoli; Daniele Lorini; Pietro Lió (2020). *Modeling Social Groups, Policies and Cognitive Behavior in COVID-19 Epidemic Phases. Basic Scenarios*. SUBSTANTIA, vol. 4, pp. 914-923, ISSN:2532-3997 <http://dx.doi.org/10.13128/SUBSTANTIA-914>

Articolo su Rivista Baldi A.; Bagnoli F. (2020). *Intransitiveness: From games to random walks*. FUTURE INTERNET, vol. 12, pp. 1-10, <http://dx.doi.org/10.3390/FI12090151>

Articolo su Rivista Pacini G.; Belmonte C.; Bagnoli F. (2020). *Science cafes, science shops and the lockdown experience in Florence and Rome*. FUTURE INTERNET, vol. 12, pp. 1-11, <http://dx.doi.org/10.3390/FI12070115>

Complete list on <https://orcid.org/0000-0002-6293-0305> or <https://www.unifi.it/p-doc2-2013-200006-B-3f2a3d2c362f2c-0.html>