

Andrea Puglisi - CV (updated to February 4, 2016)

Born in Rome on the 11th of June, 1973

Work address: CNR - ISC (UOS Sapienza) c/o Dipartimento di Fisica - Università Sapienza, p.le Aldo Moro 2, 00181, Roma, Italy

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Fields of activity

- Experiments with granular fluids (non-equilibrium spatial structures, fluctuations-response relations, ratchet effects).
- Out-of-equilibrium statistical mechanics (theory): fluctuations, breakdown of time-reversibility, hydrodynamics and kinetic theory; applied to: granular fluids, capillary physics and micro-fluidics.
- Data compression and information theory, applications to time-series analysis of dynamical systems and linguistics; modelling of self-organization of conventions in natural and artificial communicating systems.

Academic and scientific career

8/1/2014: Habilitation for both First and Second Grade Professorship (“Ordinario” and “Associato”), in Sector 02/A2 (Theoretical Physics of Fundamental Interactions)

11/12/2013: Habilitation for both First and Second Grade Professorship (“Ordinario” and “Associato”), in Sectors 02/B2 (Theoretical Physics of Matter)

since 16/7/2009: Researcher (TI) at the CNR-INFM-SMC, now CNR-ISC (Institute for Complex Systems at National Research Council), Rome

October 2008 - July 2009: Researcher and First Researcher (TD) at the CNR-INFM-SMC (Center for Statistical Mechanics and Complexity in the INFM institute of italian Center for National Research), Rome

January 2008-September 2008: Research fellowship from CNISM, at the Physics Dept. of “Sapienza” University, Rome

January 2006-December 2007: Research fellowship (from EU projects and PRIN) at the Physics Dept. of “Sapienza” University, Rome

January 2004-December 2005: “Marie-Curie” individual fellowship granted at the Laboratoire de Physique Theorique of the University Paris-Sud (Orsay, Paris)

January 2002-December 2003: Research fellowship with the Statistical Mechanics and Complexity Center of INFM, Rome

1999-2001: Ph.D. in Physics at “Sapienza” University of Rome (discussed on February 2002)

1998: Laurea in Physics at “Sapienza” University of Rome (mark: 110/110 cum laude)

Grants

October 2011: participant in a Prin project (6 units, 213KEuro for 2 years)

September 2008 - December 2014: principal investigator of a FIRB-IDEAS project (1.2MEuro for 5 years)

2008: winner of the ERC Starting Grant 2007 (above the “threshold of excellence”, classified in the “reserve list”, not funded for insufficient budget)

January - December 2006: Marie-Curie European Re-Integration Grant (~ 24000 E. for 1 year)

Publications (summary): Scholar: 2683 citations, h-index 31; ISI: 1802 citations, h-index 24, ~ 100 publications on international peer-reviewed journals (PNAS, Phys. Rep., Phys. Rev. Lett., PLOS One, Europhys. Lett., Phys. Rev. E, J. Stat. Mech., J. Stat. Phys., Physica D, etc.), exclusive authorship of 1 book (“Transport and fluctuations in granular fluids”, edited in 2014 by Springer)

Organised international conferences

May 2015: “Statistical Mechanics of non-Hamiltonian systems” (Rome, Italy; ~ 40 participants)

September 2014: “Strolling on Chaos, Turbulence and Statistical Mechanics” (Rome, Italy; ~ 110 participants)

September 2013: “Large deviations and rare events in physics and biology” (Rome, Italy; ~ 90 participants)

July 2013: “Small system nonequilibrium fluctuations, dynamics and stochastics, and anomalous behavior” (Beijing, China, at Kavli-China institute, ~ 100 participants)

June 2012: “Non-equilibrium fluctuation-response relations” (Giglio, Italy; ~ 50 participants)

June 2012: “Quasi-fluids and quasi-solids: the dynamics of active and granular matter” (Parma, Italy; ~ 70 participants)

September 2010: “Anomalous Transport: from Billiards to Nanosystems” (Sperlonga, Italy; ~ 50 participants)

Talks and presentations: ~ 50 talks given at national and international conferences (~ 35 invited).

Other appointments

Referee for three Ph. D. thesis (at the University Roma Tre and at the Twente University)

Member (CNR delegate) in the commission for spaces in the Physics Department of Sapienza University

Evaluator for national scientific projects in Italy (FIRB, at MIUR)

Evaluator for national scientific projects in Chile and in Romania

Referee for scientific journals (PNAS, Phys. Rev. Lett, Phys. Rev. E, Europhys. Lett., JSTAT, J. Stat. Phys, others)
Reviewer for “Mathematical Reviews” (invited)
Distinguished Referee Europhysics Letters 2008

Teaching and supervision of students

I have been supervisor of 6 undergraduate thesis (dissertazione and tesi magistrale) and 3 Ph.D. students (Dario Villamaina, Alessandro Manacorda and Luca Cerino) at the Department of Physics of the Sapienza University of Rome (Italy), and 1 Ph. D. student (Paolo Visco) at the Paris-Sud University.

I have been supervisor for a five months stay of an undergraduate student from the Ecole Normale Supérieure de Lyon (Camille Scalliet).

From 2012 I teach a course for undergraduates on stochastic processes (Physics Department, Sapienza University)

2010-2012: Lectures on granular fluids for the Ph. D. course in physics (Univ. Sapienza)

2000 - 2002: Assistance to the Laboratory of Programming and Numerical Computation for the 1st year graduating students in Mathematics, in the Mathematics Department of the Sapienza University of Rome; Assistance to the Calculus Course for the 1st year graduating students (in Natural Sciences) in the Mathematics Department of the Sapienza University of Rome; Assistance in the course of "Probability calculus" for the 1st year graduating students, in the Mathematics Department of the Sapienza University of Rome; Twenty hours of basic mathematics lessons held in the Sapienza University of Rome, during the Preparation Courses for freshmen undergraduates.

Known languages: Italian, English, French

- L. Cerino, A. Puglisi and A. Vulpiani
Consistent description of fluctuations requires negative temperatures
J. Stat. Mech. (2015) P12002
- A. Lasanta and A. Puglisi
An Itinerant Oscillator model with cage inertia for mesorheological granular experiments
J. Chem. Phys. 143, 064511 (2015)
- A. Lasanta, A. Manacorda, A. Prados and A. Puglisi
Fluctuating hydrodynamics and mesoscopic effects of spatial correlations in dissipative systems with conserved momentum
New J. Phys. 17, 083039 (2015)
- A Baronchelli, V Loreto and A Puglisi
Individual Biases, Cultural Evolution, and the Statistical Nature of Language Universals: The Case of Colour Naming Systems.
PLoS ONE 10, e0125019 (2015)
- Luca Cerino, Andrea Puglisi,
Entropy production for macroscopic velocity-dependent forces: the problem of dissipation without fluctuations,
Europhys. Lett. 111, 40012 (2015)
- C. Scalliet, A. Gnoli, A. Puglisi, A. Vulpiani,
Cages and anomalous diffusion in vibrated dense granular media
Phys. Rev. Lett. 114, 198001 (2015)
- Luca Cerino, Andrea Puglisi, Angelo Vulpiani
A kinetic model for the finite-time thermodynamics of small heat engines
Phys. Rev. E 91, 032128 (2015)
- Andrea Baldassarri, Andrea Puglisi, Alessandro Sarracino,
Coarsening in granular systems
C. R. Physique 16, 291 (2015)
- A Puglisi
Transport and Fluctuations in Granular Fluids
Springer Brief Series, Springer (2014)
- F. Cecconi, M. Cencini, A. Puglisi, D. Vergni, A. Vulpiani
From the Law of Large Numbers to Large Deviation Theory in Statistical Physics: An Introduction
in "Large Deviations in Physics", Lecture Notes in Physics, vol 885, p. 1 (Springer, 2014)
- A. Vulpiani, F. Cecconi, M. Cencini, A. Puglisi, D. Vergni (eds.)
Large Deviations in Physics
Lecture Notes in Physics 885, Springer (2014)
- A. Gnoli, A. Puglisi, A. Sarracino and A. Vulpiani

Nonequilibrium Brownian Motion beyond the Effective Temperature
Plos One 9, e93720 (2014)

A. Manacorda, A. Puglisi, A. Sarracino
Coulomb friction driving Brownian motors
Comm. Theor. Phys. in press,(arxiv:1402.5266)

Viola Folli, Neda Ghofraniha, Andrea Puglisi, Luca Leuzzi and Claudio Conti
Time-resolved dynamics of granular matter by random laser emission
Sci. Rep. 3, Article number: 2251

Umberto Marini Bettolo Marconi, Andrea Puglisi, Angelo Vulpiani
About an H-theorem for systems with non-conservative interactions
J. Stat. Mech. (2013) P08003

A. Gnoli, A. Sarracino, A. Petri, A. Puglisi
Non-equilibrium fluctuations in frictional granular motor: experiments and kinetic theory
Phys. Rev. E. 87, 052209 (2013)

A. Gnoli, A. Puglisi, H. Touchette
Granular Brownian motion with dry friction
Europhys. Lett. 102, 14002 (2013)

G Gradenigo, A Sarracino, A Puglisi, H Touchette
Fluctuation relations without uniform large deviations
J. Phys. A: Math. Theor. 46, 335002 (2013)

A. Sarracino, A. Gnoli, A. Puglisi
Ratchet effect driven by Coulomb friction: the asymmetric Rayleigh piston
Phys. Rev. E 87, 040101(R) (2013)

- A. Gnoli, A. Petri, F. Dalton, G. Gradenigo, G. Pontuale, A. Sarracino, A. Puglisi
Brownian Ratchet in a Thermal Bath Driven by Coulomb Friction
Phys. Rev. Lett. 110, 120601 (2013)
- G Gradenigo, A Puglisi, A Sarracino, A Vulpiani and D Villamaina
The out of equilibrium response function in sub-diffusive systems
Phys. Scr. 86 058516 (2012)
- A Puglisi
Comprendere l'universalita' dei colori. Verso un'analisi statistica
CNR Highlights 2010/2011 page 205 (ed. CNR 2012)
- V. Folli, A. Puglisi, L. Leuzzi, C. Conti
Shaken Granular Lasers
Phys. Rev. Lett. 108, 248002 (2012)
- G. Gradenigo, A. Puglisi, A. Sarracino
Entropy production in non-equilibrium fluctuating hydrodynamics
J. Chem. Phys. 137, 014509 (2012)
- G. Gradenigo, A. Puglisi, A. Sarracino, D. Villamaina, A. Vulpiani
Out-of-equilibrium generalized fluctuation-dissipation relations
Chapter in: R.Klages, W.Just, C.Jarzynski (Eds.), Nonequilibrium Statistical Physics of Small Systems: Fluctuation Relations and Beyond (Wiley-VCH, Weinheim, 2012)
- A Crisanti, A Puglisi, D Villamaina
Non-equilibrium and information: the role of cross-correlations
Phys. Rev. E 85, 061127 (2012)
- A. Puglisi, A. Sarracino, G. Gradenigo, D. Villamaina
Dynamics of a massive intruder in a homogeneously driven granular fluid
Granular Matter 14, 235 (2012)
- A. Puglisi, A. Gnoli, G. Gradenigo, A. Sarracino and D. Villamaina
Structure factors in granular experiments with homogeneous fluidization
J. Chem. Phys. 136, 014704 (2012)
- G. Gradenigo, U. Marini Bettolo Marconi, A. Puglisi, A. Sarracino
Non-equilibrium fluctuations in a driven stochastic Lorentz gas
Phys. Rev. E 85, 031112 (2012)
- T. Gong, A. Baronchelli, A. Puglisi and V. Loreto
Exploring the Roles of Complex Networks in Linguistic Categorization
Artificial Life 18, 107-121 (2011)
- A Puglisi
Explaining universal colour categories. Towards a statistical analysis
CNR Highlights 2009/2010 page 193 (ed. CNR 2011)

- G. Costantini and A. Puglisi (2011)
Role of Molecular Chaos in Granular Fluctuating Hydrodynamics
Mathematical Modelling of Natural Phenomena, 6, pp 2-18 (2011)
- G Costantini and A Puglisi
Fluctuating hydrodynamics in a vertically vibrated granular fluid with gravity
Phys. Rev. E 84, 031307 (2011)
- G Gradenigo, A Sarracino, D Villamaina, A Puglisi,
Fluctuating hydrodynamics and correlation lengths in a driven granular fluid,
J. Stat. Mech. (2011) P08017
- G. Gradenigo, A. Sarracino, D. Villamaina and A. Puglisi
Non-equilibrium length in granular fluids: from experiment to fluctuating hydrodynamics
Europhys. Lett. 96, 14004 (2011)
- V. Loreto, A. Baronchelli, A. Mukherjee, A. Puglisi and F. Tria
Statistical physics of language dynamics
J. Stat. Mech. (2011) P04006
- M. Falcioni, A. Puglisi, A. Sarracino, D. Villamaina, A. Vulpiani
Estimate of temperature and its uncertainty in small systems
Am. J. Phys 79, 777 (2011)
- A Mukherjee, F Tria, A Baronchelli, A Puglisi and V Loreto
Aging in Language Dynamics
PLoS ONE 6, e16677 (2011)
- D Villamaina, A Sarracino, G Gradenigo, A Puglisi, A Vulpiani
On anomalous diffusion and out of equilibrium response function in one-dimensional models
J. Stat. Mech. (2011) L01002
- A. Baldassarri, A. Puglisi, D. Villamaina and A. Vulpiani
Relazioni fluttuazione-dissipazione: un finestra sul mondo microscopico
Lettera Matematica PRISTEM vol. 77, pag.21 (2011)
- A fast no-rejection algorithm for the Category Game
F. Tria, A. Mukherjee, A. Baronchelli, A. Puglisi and V. Loreto
Journal of Computational Science 2, 316 (2011)
- A Puglisi
L interazione fra individui porta alla riduzione del numero dei colori
CNR Highlights 2008/2009 page 131 (ed. CNR 2010)
- G. Gradenigo, A. Sarracino, D. Villamaina, T. Grigera, A. Puglisi
The ratchet effect in an ageing glass
J. Stat. Mech. (2010) L12002

- A. Sarracino, D. Villamaina, G. Gradenigo, A. Puglisi
Irreversible dynamics of a massive intruder in dense granular fluids
Europhys. Lett. 92 34001 (2010)
- G. Costantini and A. Puglisi
Fluctuating hydrodynamics for dilute granular gases: a Monte Carlo study
Phys. Rev. E 82, 011305 (2010)
- A. Sarracino, D. Villamaina, G. Costantini and A. Puglisi
Granular Brownian motion
J. Stat. Mech. (2010) P04013
- A. Puglisi, S. Pigolotti, L. Rondoni, A. Vulpiani
Entropy production and coarse-graining in Markov processes
J. Stat. Mech. (2010) P05015
- U. Marini Bettolo Marconi, A. Puglisi, L. Rondoni and A. Vulpiani
Des fluctuations a la dissipation
Pour la Science 388 (Fevrier 2010)
- A Baronchelli, T Gong, A Puglisi and V Loreto
Modeling the emergence of universality in color naming patterns
Proc. Natl. Acad. Sci. USA 107, 2403 (2010)
- G. Costantini, A. Puglisi, U. Marini Bettolo Marconi
Granular ratchets
Eur. Phys. J. Special Topics 179, 197 (2009)
- G. Lacorata, A. Puglisi, A. Vulpiani
On the Fluctuation-Response Relation in Geophysical Systems
Int. J. Mod. Phys. B 23, 5515 (2009)
- G Costantini, A Puglisi and U Marini Bettolo Marconi
Models of granular ratchets
J. Stat. Mech. (2009) P07004
- F. Diotallevi, A. Puglisi, A. Lamura and S. Succi
Capillary filling with randomly coated walls
J. Stat. Mech. (2009) L02001
- A Puglisi and D Villamaina
Irreversible effects of memory
Europhys.Lett. 88, 30004 (2009)
- D. Villamaina, A. Baldassarri, A. Puglisi and A. Vulpiani
Fluctuation dissipation relation: how to compare correlation functions and responses?
J. Stat. Mech. (2009) P07024

- A. Baronchelli, C. Cattuto, V. Loreto and A. Puglisi
Complex systems approach to the emergence of language
- Language, Evolution and the Brain (2009) J. W. Minett and W. S-Y. Wang
eds.
- V Loreto, A Baronchelli and A Puglisi
Mathematical modeling of Language Games
Evolution of Communication and Language in Embodied Agents (2009) S Nolfi
and M Mirolli eds.
- T. Gong, A. Puglisi, V. Loreto and W.S.-Y. Wang
Conventionalization of Linguistic Categories under Simple Communicative Con-
straints
IEEE CONGRESS ON EVOLUTIONARY COMPUTATION, page 1686
- D Villamaina, A Puglisi and A Vulpiani
Fluctuation-Dissipation relation in sub-diffusive systems: the case of granular
single-file
J. Stat. Mech. L10001 (2008)
- A Baldassarri, A Puglisi and A Vulpiani
Fluctuations and response in granular gases: validity and failure of Einstein
relation.
AIP Conference Proceedings - THE XV INTERNATIONAL CONGRESS ON
RHEOLOGY: The Society of Rheology 80th Annual Meeting 1027 911 (AIP
2008) A Co and G L Leal and R H Colby and A J Giacomini eds.
- A. Puglisi, M. Assaf, I. Fouxon and B. Meerson
Attempted density blowup in a freely cooling dilute granular gas: hydrodynam-
ics versus molecular dynamics
Phys. Rev. E 77 021305 (2008)
- G Costantini, U Marini Bettolo Marconi and A Puglisi
Noise rectification and fluctuations of an asymmetric inelastic piston
Europhys. Lett. 82 50008 (2008)
- A. Barrat, A. Puglisi, E. Trizac, P. Visco and F. Van Wijland
Fluctuations in Granular Gases
Lecture Notes in Mathematics - Mathematical Models of Granular Matter (Springer
2008) P. Giovine G. Capriz and P. M. Mariano eds.
- F. Diotallevi, L. Biferale, S. Chibbaro, A. Puglisi and S. Succi
Front pinning in capillary filling of chemically coated channels
Phys. Rev. E 78 036305 (2008)
- U. M. Bettolo Marconi, A. Puglisi, L. Rondoni and A. Vulpiani
Fluctuation-Dissipation: Response Theory in Statistical Physics
Physics Reports 461 111 (2008)

- A. Puglisi, A. Baronchelli and V. Loreto
Cultural route to the emergence of linguistic categories
Proc Natl Acad Sci USA 105 7936 (2008)
- T Gong, A Puglisi, V Loreto and W S-Y Wang
Conventionalization of Linguistic Knowledge under Communicative Constraints
Biological Theory 3 2 (2008)
- A. Puglisi, A. Baldassarri and A. Vulpiani
Violation of the Einstein relation in Granular Fluids: the role of correlations
J. Stat. Mech. P08016 (2007)
- G. Costantini, A. Puglisi and U. Marini Bettolo Marconi
Velocity fluctuations in a one dimensional Inelastic Maxwell model
J. Stat. Mech. P08031 (2007)
- J. Ignacio Alvarez-Hamelin and A. Puglisi
The dynamical collision network in granular gases.
Physical Review E 75 051302 (2007)
- G. Costantini, A. Puglisi and U. Marini Bettolo Marconi
A Granular Brownian Ratchet Model
Phys. Rev. E 75 061124 (2007)
- P. Visco, A. Puglisi, A. Barrat, E. Trizac and F. van Wijland
Power injected in a granular gas
C. R. Physique 8 641 (2007)
- P. Visco, A. Puglisi, A. Barrat, F. van Wijland and E. Trizac
Energy fluctuations in vibrated and driven granular gases
European Physical Journal B 51 377-387 (2006)
- P. Visco, A. Puglisi, A. Barrat, E. Trizac and F. van Wijland
Fluctuations of Power Injection in Randomly Driven Granular Gases
Journal of Statistical Physics 125 529-564 (2006)
- A. Puglisi, P. Visco, E. Trizac and F. van Wijland
Dynamics of a tracer granular particle as a nonequilibrium Markov process
Physical Review E 73 021301 (2006)
- A Puglisi, L Rondoni and A Vulpiani
Relevance of initial and final conditions for the fluctuation relation in Markov processes
J. Stat. Mech. 2006 P08010 (2006)
- Simple models for compartmentalized sand
U. M. B. Marconi, F. Cecconi and A. Puglisi
Traffic and Granular Flow '03, Pages: 579-584 (2005)
- A Baldassarri, A Barrat, G D'Anna, V Loreto, P Mayor and A Puglisi
What is the temperature of a granular medium?
Journal of Physics: Condensed Matter 17 S2405-S2428 (2005)

- A. Puglisi, F. Cecconi and A. Vulpiani
Models of fluidized granular materials: examples of non-equilibrium stationary states
Journal of Physics: Condensed Matter 17 S2715-S2730 (2005)
- B. Meerson and A. Puglisi
Towards a continuum theory of clustering in a freely cooling inelastic gas
Europhysics Letters (EPL) 70 478-484 (2005)
- P. Visco, A. Puglisi, A. Barrat, E. Trizac and F. van Wijland
Injected power and entropy flow in a heated granular gas
Europhysics Letters (EPL) 72 55-61 (2005)
- A. Puglisi, P. Visco, A. Barrat, E. Trizac and F. van Wijland
Fluctuations of Internal Energy Flow in a Vibrated Granular Gas
Physical Review Letters 95 110202 (2005)
- A. Puglisi, A. Barrat, E. Trizac, P. Visco and F. van Wijland
On the validity of Gallavotti-Cohen fluctuation relation in granular gases
- Powder and Grains 2005 (Balkema 2005) A. A. Balkema eds.
- C. Lopez and A. Puglisi
Continuum description of finite-size particles advected by external flows: The effect of collisions
Physical Review E 69 046306 (2004)
- A. Barrat, V. Loreto and A. Puglisi
Temperature probes in binary granular gases
Physica A: Statistical Mechanics and its Applications 334 513-523 (2004)
- U. Marini Bettolo Marconi, A. Baldassarri and A. Puglisi
Application of Simple Models to the Study of Nonequilibrium Behaviour of Inelastic Gases
Phase Transitions 77 863 (2004)
- F. Cecconi, F. Diotallevi, U. Marini Bettolo Marconi and A. Puglisi
Fluid-like behavior of a one-dimensional granular gas
The Journal of Chemical Physics 120 35-42 (2004)
- F. Cecconi, U. Marini Bettolo Marconi, F. Diotallevi and A. Puglisi
Inelastic hard rods in a periodic potential
The Journal of Chemical Physics 121 5125-5132 (2004)
- U. Marini Bettolo Marconi, F. Cecconi and A. Puglisi
Simple Models for compartmentalized sands
- Traffic and Granular Flows 03 (Springer 2004) P. H. L. Bovy and S. P. Hoogen-
doorn and M. Schreckenberg and D. E. Wolf eds.

D. Paolotti, A. Barrat, U. Marini Bettolo Marconi and A. Puglisi
Thermal convection in monodisperse and bidisperse granular gases: A simulation study
Physical Review E 69 061304 (2004)

Data compression approach to sequence analysis
V. Loreto and A. Puglisi
Modeling of Complex Systems 661, 184 (2003)

C. Lopez and A. Puglisi
Sand stirred by chaotic advection
Physical Review E 67 041302 (2003)

F. Cecconi, A. Puglisi, U. Marini Bettolo Marconi and A. Vulpiani
Noise Activated Granular Dynamics
Physical Review Letters 90 064301 (2003)

U. Marini Bettolo Marconi and A. Puglisi
Statistical mechanics of granular gases in compartmentalized systems
Physical Review E 68 031306 (2003)

A. Baldassarri, U. M. B. Marconi and A. Puglisi
Velocity fluctuations in cooling granular gases
Lecture Notes in Physics - Granular Gas Dynamics 624 (Springer 2003) eds.

D. Paolotti, C. Cattuto, U. Marini Bettolo Marconi and A. Puglisi
Dynamical properties of vibrofluidized granular mixtures
Granular Matter 5 75–83 (2003)

A. Puglisi, D. Benedetto, E. Caglioti, V. Loreto and A. Vulpiani
Data compression and learning in time sequences analysis
Physica D 180 92-107 (2003)

V. Loreto and A. Puglisi
Data compression approach to sequence analysis
- MODELING OF COMPLEX SYSTEMS: Seventh Granada Lecture 661 (American Institute of Physics 2003) eds.

U. Marini Bettolo Marconi, A. Puglisi and A. Vulpiani
La forza dei granelli (The force of grains)
Le Scienze (Italian Version of Scientific American) Agosto (2002)

A. Puglisi, A. Baldassarri and V. Loreto
Fluctuation-dissipation relations in driven granular gases
Physical Review E 66 061305 (2002)

A. Baldassarri, A. Puglisi and U. Marini Bettolo Marconi
Kinetic models of inelastic gases
Mathematical Models and Methods in Applied Sciences 12 965-983 (2002)

- A. Baldassarri, U. Marini Bettolo Marconi and A. Puglisi
Influence of correlations on the velocity statistics of scalar granular gases
Europhysics Letters (EPL) 58 14-20 (2002)
- A. Baldassarri, U. Marini Bettolo Marconi and A. Puglisi
Cooling of a lattice granular fluid as an ordering process
Physical Review E 65 051301 (2002)
- U. Marini Bettolo Marconi and A. Puglisi
Mean-field model of free-cooling inelastic mixtures
Physical Review E 65 051305 (2002)
- U. Marini Bettolo Marconi and A. Puglisi
Steady-state properties of a mean-field model of driven inelastic mixtures
Physical Review E 66 011301 (2002)
- R. Pagnani, U. Marini Bettolo Marconi and A. Puglisi
Driven low density granular mixtures
Physical Review E 66 051304 (2002)
- U. Marini Bettolo Marconi, A. Baldassarri and A. Puglisi
Models of free cooling granular gases
Advances in Complex Systems 4 321-331 (2001)
- A. Baldassarri, U. Marini Bettolo Marconi, A. Puglisi and A. Vulpiani
Driven granular gases with gravity
Physical Review E 64 011301 (2001)
- A. Puglisi, V. Loreto, U. Marini Bettolo Marconi, A. Petri and A. Vulpiani
Granular gases: where standard kinetic theory fails
INFM Highlights 1998-1999 (2000)
- A. Puglisi, V. Loreto, U. Marini Bettolo Marconi and A. Vulpiani
Kinetic approach to granular gases
Physical Review E (Statistical Physics, Plasmas, Fluids, and Related Interdisciplinary Topics) 59 5582-5595 (1999)
- A. Puglisi, V. Loreto, U. Marini Bettolo Marconi, A. Petri and A. Vulpiani
Clustering and Non-Gaussian Behavior in Granular Matter
Physical Review Letters 81 3848-3851 (1998)

List of all talks and presentations

- October 2015: Talk (contributed) at the School New Horizons in Nonequilibrium Thermodynamics, Erice, Italy
- September 2015: Talk (invited) at the Workshop Biophys'15 From physics to biology and beyond, Physics Department, Firenze University, Italy
- July 2015: Talk (invited) at the Institute for Multiscale Simulations, Erlangen, Germany
- July 2015: Talk (invited) at the Workshop Non standard transport: from anomalous diffusion to reaction spreading in heterogeneous systems, GSSI, L'Aquila, Italy
- May 2015: Talk (invited) at the Department of Mathematics, Sapienza University, Roma, Italy
- March 2015: Talk (invited) at the Workshop "Flowing Matter Across the Scales", Roma, Italy
- March 2015: Talk (invited) at the Library of the Physics Department, Sapienza University, Roma, Italy
- November 2014: Talk (invited) at Workshop on Large Deviations in Statistical Physics, Stellebosch, South Africa
- May 2014: Talk (contributed) at the Workshop Understanding and controlling nano and meso-scale friction, Palma de Malorca, Spain
- March 2014: Talk (invited) at the Physics Department, Tor-Vergata University, Rome, Italy
- December 2012: Talk (invited) at Southern Workshop on Granular Material, Puerto Varas, Chile
- January 2012: Talk (contributed) at Journées de Physique Statistique in the ESPCI, Paris
- December 2011: Talk (invited) at the ISC National Conference, Firenze (Italy)
- September 2011: Talk (invited) at the Workshop "Granular and active fluids", ZCam, Zaragoza (Spain)
- August 2011: Talk (invited) at the Conference "Non-equilibrium processes: the last 40 years and the future", Obergurgl (Austria)
- July 2011: Talk (invited) at the Presentation of CNR-Highlights (Rome, Italy)
- April 2011: Talk (invited) at the Observatoire de Nice (Nice, France)
- January 2011: Talk (invited) at the ISC-CNR Journal Club (Rome, Italy)
- July 2010: Talk (contributed) at the 24th StatPhys conference in Cairns, Australia
- December 2009: Talk (contributed) at the Southern Workshop on Granular Material, Vina del Mar, Chile
- November 2009: Talk (invited) at EPFL, Lausanne (Suisse)
- June 2009: Talk (invited) at the "XIV Convegno di Fisica Statistica", Parma, Italy
- September 2008: Talk (invited) at the "XIV workshop on statistical mechanics and non-perturbative field theory", Bari, Italy
- June 2008: Poster at the "XIII Convegno di Fisica Statistica", Parma, Italy
- February 2008: Talk (contributed) at the "72. Annual Meeting of the DPG and

DPG Spring Meeting of the Condensed Matter Division”, Berlin, Germany
 September 2007: Poster presented at the “Granular fluids: a proving ground for Nonequilibrium Statistical Mechanics.” held in Sevilla, Spain
 July 2007: Talk (contributed) at the XXIII Statphys conference held in Genova
 July 2007: Talk (contributed) at the Statphys-Satellite workshop “Statics and dynamics of granular media and colloidal suspensions” held in Napoli
 February 2007: Lecture (invited) at the Seminaire Transalpin, held in Torino, Villa Gualino, Italy
 November 2006: Talk (contributed) at the Réunion du GDR Phénix, held in Paris, France
 October 2006: Talk (invited) at the Workshop “Semiotics Dynamics: the emergence of grammar”, held in Bagno Vignoni, Italy
 September 2006: Talk (invited) at the XXIV Workshop on “ Fisica teorica e struttura della materia” held in Levico Terme, Italy
 March 2006: Talk (invited) at the ESF Workshop “Fluctuations and Dissipation: The new synthesis far from equilibrium”, Camerino, Italy.
 February 2006: Talk (invited) at The First Australian-Italian Workshop on Statistical Physics, Brisbane, Australia.
 September 2005: Talk (contributed) at Fluctuations and Noise in Out of Equilibrium Systems, Nice, France.
 July 2005: Talk (contributed) at Powders and Grains 2005, Stuttgart, Germany.
 June 2005: Invited lecture at the Symposium on ”Granular Matter: Mathematical Modeling and Physical Instances”, Reggio Calabria, Italy.
 February 2005: Talk (invited) at the Session on Granular Material at Institut Henry Poincare, Paris.
 January 2005: Talk (contributed) at the Journées de Physique Statistique in the ESPCI, Paris
 July 2004: Talk (invited) at the Workshop Driven Many-Particle Systems held in Dresden at Max-Planck Institute.
 June 2004: Talk (invited) at the Workshop Experimentalist-Modeling Interactions : New Trends on Modeling Granular Flows held in Lyon at Cecam.
 November 2003: Talk (invited) at the Workshop Florida-Paris Workshop on Granular Fluids, held in Paris at Reid Hall.
 June 2003: Talk (invited) at the University of Palma de Mallorca, Spain.
 September 2002: Talk (invited) at the CECAM workshop on Granular Gases (Theory - Experiment - Simulation) CECAM, Lyon (FRANCE)
 July 2002: Poster at the Gordon Conference ”Granular & Granular-Fluid Flow” Holderness School (Plymouth, NH, USA)
 June 2002: Poster at the VII National Workshop on Statistical Mechanics and Complex Systems University of Parma.
 16th of May, 2001: Talk (invited) at the University of Camerino (Italy)
 25th of July, 2000: Talk (invited) at the Workshop ”Statistical physics for dynamic granular media” held in Lion (France), July 24-27, 2000.
 29th of March, 2000. Talk (invited) at the XIX Convegno di Fisica Teorica e Struttura della Materia held in Fai della Paganella, March 26-29, 2000.
 23rd of October, 1998. Talk (invited) at the Workshop ”Physics of granular

matter" held in the Scuola Normale Superiore, Pisa, October 22-24, 1998.

24th of July, 1998. Poster at the XX Conference Internationale IUPAP de Physique Statistique" held in Paris (Unesco Palace and Sorbonne University), July 20-24, 1998.

22nd of June, 1998. Talk (invited) at the "Terzo Convegno Nazionale di Fisica Statistica" held in the University of Parma, June 22-24, 1998.

28th of November, 1997. Talk (contributed) at the "Dry Granular Media Meeting" held in the University Jussieu, Paris, November 28, 1997.