

## Curriculum vitae et studiorum

Prof. Emilio N.M. Cirillo  
 Roma, Friday 20<sup>th</sup> May, 2022

### General informations

- Family name: Cirillo
- Name: Emilio Nicola Maria
- Address: Dipartimento SBAI, via A. Scarpa 16, 00161 Roma, Italy
- Phone number: +390649766808
- E-mail address: emilio.cirillo@uniroma1.it
- ORCID: 0000-0003-3673-2054
- Working status: full professor of Mathematical Physics at Dipartimento di Scienze di Base e Applicate per l'Ingegneria, Sapienza Università di Roma
- Spoken languages: italian, english, and french
- Interests: Statistical Mechanics, interacting particle systems, equilibrium and out of equilibrium systems, rigorous results and Monte Carlo simulations, porous media
- Computer experience: programming languages C and Fortran, Linux, Mathematica, L<sup>A</sup>T<sub>E</sub>X.

### Education

- PhD: “dottorato di ricerca in Fisica” (PhD in Physics) at Università degli Studi di Bari in 1997. Advisors: Prof. Enzo Olivieri (II Università di Roma Tor Vergata) and Dr. Giuseppe Gonnella (Università degli Studi di Bari). Title of PhD thesis: Aspetti statici e dinamici delle transizioni di fase: alcuni modelli e metodologie (Statical and dynamical aspects of phase transitions: models and methods).
- University: graduated summa cum laude in Physics at Università degli Studi di Bari in 1993. Title of “Laurea” thesis: Metastabilità e nucleazione: studio rigoroso di alcune dinamiche microscopiche (Metastability and nucleation: a rigorous study of some microscopic dynamics). Laurea thesis advisors: Professor Enzo Olivieri (Università di Roma Tor Vergata) and Professor Matteo Villani (Università degli Studi di Bari).
- High school: attended “Liceo Scientifico” (scientific high school) and passed the final examination with the maximum.

### Fellowships

- October 1998: one year postdoc fellowship in the framework of the “European Union TMR Programme Project ERBF MRX CT 960075A” related to the “Stochastic Analysis and its Applications” network.
- October 1997: one year postdoc fellowship in the framework of the “European Union TMR Programme Project ERBF MRX CT 960075A” related to the “Stochastic Analysis and its Applications” network.
- November 1994: three years PhD fellowship at Università degli Studi di Bari.

### Habilitations

- 2013, Full Professor national scientific habilitation in Mathematical Physics (01/A4).
- 2013, Associate Professor national scientific habilitation in Mathematical Physics (01/A4).

### Positions

- September 2019 – : full professor of Mathematical Physics, Sapienza Università di Roma.
- October 2015 – September 2019: associate professor in Mathematical Physics, Sapienza Università di Roma.
- November 2000: “ricercatore universitario” (assistant professor) in Mathematical Physics, Università degli Studi di Roma “La Sapienza.”
- July 1999: two year researcher position at “II Università degli Studi di Roma – Tor Vergata”.
- October 1998: one year postdoc position at the Mathematics Department of the “Université Paul Sabatier de Toulouse.” Research activity carried out at “CMI – Université de Provence – Marseille.”
- October 1997: one year postdoc position at the Mathematics Department of the “Université Paris Sud.”

### Achievements

- Granted the Finanziamento Attività base di Ricerca (FFABR 2017) from the Ministero dell'Istruzione dell'Università e della Ricerca (MIUR) as associate professor.
- TU/e Eindhoven, ICMS (Institute for Complex Molecular Systems) international fellow (May – June 2014).
- Granted the Finanziamento MURST “Progetto Giovani Ricercatori” Anno 2001 (young researcher fund by University Scientific and Technological Research Ministry, year 2001).

### Research associations

- Gruppo Nazionale di Fisica Matematica (GNFM).
- Centro di Ricerca CERSITES.

### Visits abroad

- June 2019, Département de Mathématiques et Applications, Ecole Normale Supérieure, Paris, France.
- June–July 2017, Department of Mathematics, Utrecht University, The Netherlands.
- June 2014, Institute for Complex Molecular Systems (ICMS), TU/Eindhoven, The Netherlands.
- May 2014, Institute for Complex Molecular Systems (ICMS), TU/Eindhoven, The Netherlands.
- March 2013, Department of Mathematics, Utrecht e Department of Mathematics, Delft, The Netherlands.
- February 2012, “Stochastic Activity Month” a Eurandom, Eindhoven, The Netherlands.
- February–March 2001, Physics Department, Theoretical Physics Division, Helsinki, Finland.
- Fall 1996, Mathematics Department, Rutgers University, New Brunswick, NJ, US.

### Academic activity

- Member of the Council of the Facoltà di Ingegneria Civile e Industriale Sapienza Università di Roma, since January 2021.
- Member of the Department Council of Dipartimento di Scienze di Base e Applicate per l’Ingegneria, Sapienza Università di Roma, since November 2019.
- Vice Director of the Dipartimento di Scienze di Base e Applicate per l’Ingegneria, Sapienza Università di Roma, since November 2019.
- Member of the PhD Committee Meccanica Teorica e Applicata, Sapienza Università di Roma, since 2009.
- Responsible of the computation server of the Mathematics Division of the Dipartimento di Scienze di Base e Applicate per l’Ingegneria, Sapienza Università di Roma, since September 2011.
- Member of the Academic Senate of Sapienza Università di Roma, elected as representative of the associate professors of the scientific area, from November 2016 to September 2019.
- March 2012 – November 2013: member of the Sapienza Università di Roma Scientific Committee.
- Member of the Scientific Committee of the Mathematics Division of the Dipartimento di Scienze Applicate e di Base per l’Ingegneria from June 2011 to June 2012.
- Member of the Scientific Committee of the Mathematics Division of the Dipartimento di Metodi e Modelli Matematici per le Scienze Applicate from January 2010 to July 2010.
- 2003–2009 Coordinator of the “Dipartimento MeMo-Mat” committee supervising the information systems and the local area network of the department itself.

### Member of PhD defense committee

- October 2020: member of the Committee for the PhD defense of Tieu Thi Kim Thoa, GSSI (Gran Sasso Science Institute).
- February 2020: member of the Committee for the PhD defense of Andrea Richaud, PhD in Physics, Politecnico di Torino.
- February 2020: member of the Committee for the PhD defense of Davide Botto, PhD in Physics, Politecnico di Torino.
- June 2019: member of the “Jury de soutenance” for the “Thèse de Doctorat in Mathématique” of Wei Zhou, Université paris–Saclay.
- December 2018: member of the Committee for the PhD defense of Riccardo Mariani, Université Aix–Marseille and Università Tor Vergata.
- May 2018: member of the Committee for the PhD defense of Ji Myeong Lee, GSSI (Gran Sasso Science Institute).
- October 2012: opponent in the Committee for the PhD thesis “Metastability for low–temperature Kawasaki dynamics with two types of particles,” Alessio Troiani, Faculteit der Wiskunde en Natuurwetenschappen, Leiden University.

- August 2012: member of the Reading Committee for the PhD thesis “Metastability for low–temperature Kawasaki dynamics with two types of particles,” Alessio Troiani, Faculteit der Wiskunde en Natuurwetenschappen, Leiden University.

### Board member

- October 2020: board member for a RTDA researcher position in Mathematical Physics at ‘Università degli Studi di Bari Aldo Moro, D.R. 2621 del 08-10-2020.
- December 2018: board member for a RTDA researcher position in Mathematical Physics at Università di Roma 3, D.R. 1969/2018, 09-11-2018.
- September 2016: board member for a RTDB researcher position in Mathematical Physics at Università di L’Aquila, D.R. 861 - 2016, 06-07-2016.
- September 2015: board member for the admission to the PhD school “Meccanica teorica e applicata”, DR. 2657/2015.
- Board member of the competition for a mathematical physics researcher position, Facoltà di Ingegneria, Università del Salento, D.R. n. 2659, 4<sup>th</sup> December, 2007.
- Board member of the competition for a computer technician, Università degli Studi di Roma “La Sapienza,” Gazzetta Ufficiale IV serie speciale n<sup>o</sup> 84, 3<sup>rd</sup> November, 2006.
- Board member of the competition for a mathematical physics researcher position, Facoltà di Scienze Matematiche Fisiche e Naturali, Università degli Studi Roma Tre, D.R. n. 570–2006, 9<sup>th</sup> March, 2006.

### PhD students

- 2020–: cosupervisor of the PhD student Vishnu Raveendran, Karlstad University, Karlstad (Sweden), supervisor Adrian Muntean.
- 2014–17: supervisor of the PhD thesis “Particle based modelling of dynamics in presence of obstacles,” dott. Alessandro Ciallella.
- 2012–15: supervisor of the PhD thesis “On phase transitions in porous media under consolidation: analytic, rigorous and numerical results,” dott. Pietro Artale Harris.
- 2007: supervisor of the PhD thesis “Rigorous results on models of non equilibrium statistical mechanics,” dr. Cristian Spitoni, PhD school “Modelli e Metodi Matematici per la tecnologia e la società.”

### Teaching

- From 2019–20 to 2021–22: “Modelli Matematici per la Meccanica,” co–teacher D. Andreucci, Laurea in Ingegneria Aerospaziale, Sapienza Università di Roma.
- From 2018–19 to 2021–22: “Fisica Matematica,” Laurea in Ingegneria Civile, Sapienza Università di Roma.
- From 2008–09 to 2020–21: “Meccanica Razionale,” Laurea in Ingegneria Civile e Industriale, Sapienza Università di Roma, Latina.

- 2017–18: “Fisica Matematica,” co-teacher D. Andreucci, Laurea Magistrale in Ingegneria Meccanica, Sapienza Università di Roma.
- From 2013–14 to 2017–18: “Laboratorio di Meccanica Razionale,” Laurea in Ingegneria Civile e Industriale, Sapienza Università di Roma, Latina. Sapienza Università di Roma.
- 2013–14: “Laboratorio di Meccanica Analitica,” Laurea Magistrale in Ingegneria Meccanica, Sapienza Università di Roma.
- From 2004–05 to 2007–08: “Fisica Matematica,” Laurea Specialistica in Ingegneria Meccanica, Università di Roma “La Sapienza.”
- 2003–04: “Meccanica Razionale,” Corso di Laurea in Ingegneria Meccanica, Università di Roma “La Sapienza.”
- 2002–03: lectures for “Metodi matematici per l’Ingegneria,” Corso di Laurea in Ingegneria Civile, Università di Roma “La Sapienza.”
- 2001–02: “Meccanica Razionale,” Corso di Laurea in Ingegneria Meccanica e Aerospaziale, Università di Roma “La Sapienza,” Latina.
- 2001–02: “Metodi Matematici,” Corso di Laurea in Ingegneria Meccanica, Università di Roma “La Sapienza.”
- AA 2000–01: exercises for “Meccanica Razionale,” Corso di Laurea in Ingegneria Meccanica, Università di Roma “La Sapienza.”
- 2000–01: exercises for “Metodi Matematici per l’Ingegneria,” Corso di Laurea in Ingegneria Meccanica, Facoltà d’Ingegneria, Università di Roma “La Sapienza.”
- 2000–01 exercises for “Sistemi Dinamici” (Prof. G. Gentile), III Università di Roma.
- 1999–00: exercises for “Probabilità e Statistica” (Prof. F. Martinelli), III Università di Roma.
- 1999–00: exercises for “Sistemi Dinamici” (Prof. G. Gentile), III Università di Roma.
- 1996–97: exercises for “Fisica II” for Ingegneria Elettronica (Prof. G. Selvaggi), Politecnico di Bari.
- 1995–96: exercises for “Fisica II” for Ingegneria Elettronica (Prof. L. Guerriero), Politecnico di Bari.
- 1994–95: exercises for “Fisica II” for Ingegneria Elettronica (Prof. L. Guerriero), Politecnico di Bari.
- 2010–11: “Statistical Mechanics,” Dottorato di Ricerca in Meccanica Teorica e Applicata, Sapienza Università di Roma.
- 2007–08: “Statistical Mechanics,” Dottorato di Ricerca in Meccanica Teorica e Applicata, Università di Roma “La Sapienza.”

#### Research projects

- 2021. Visiting project Sapienza Università di Roma, A. Muntean (Karlstad University, Karlstad, Sweden).
- 2021. Coordinator of the SBAI research unit of the project “DIAGnostic potential of disorder: development of an innovative NANOstructured platform for rapid, label-free and low-cost analysis of genomic DNA” financed by Regione Lazio “Progetti di Gruppi di ricerca” call 2020, principal investigator Valentina Mussi.
- 2018. Progetto Ricerca Sapienza “Heterogeneous environments in biological systems, pedestrian motion and materials with memory.” (RM118164367D6ACA)
- 2017. Progetto Ricerca Sapienza “Evolution phenomena in heterogeneous environments: application to biological systems, pedestrian motion and materials with memory”.
- 2014. Ricerche Universitarie Sapienza Università di Roma. “Modelli matematici per il moto di individui interagenti”.
- 2012. Visiting project Sapienza Università di Roma, A. Muntean (TU/e, Eindhoven, The Netherlands), “Modelli matematici per l’evacuazione di una regione chiusa in assenza di visibilità.”
- 2009. Ateneo Federato di Scienza e della Tecnologia dell’Università degli Studi di Roma “La Sapienza”, “Aspetti dinamici delle transizioni di fasi in sistemi continui e di spin.”
- 2008. Ateneo Federato di Scienza e della Tecnologia dell’Università degli Studi di Roma “La Sapienza”, “Aspetti dinamici delle transizioni di fasi in sistemi continui e di spin.”
- 2007. Ateneo Federato di Scienza e della Tecnologia dell’Università degli Studi di Roma “La Sapienza”, “Dinamiche stocastiche per sistemi di particelle e di spin.”
- 2006. Facoltà d’Ingegneria dell’Università degli Studi di Roma “La Sapienza”, “Dinamiche stocastiche per sistemi di particelle e di spin.”
- 2005. Facoltà d’Ingegneria dell’Università degli Studi di Roma “La Sapienza”, “Dinamiche stocastiche per sistemi di particelle e di spin.”
- 2004. Facoltà d’Ingegneria dell’Università degli Studi di Roma “La Sapienza”, “Sistemi a finiti e infiniti gradi di libertà.”
- 2003. Facoltà d’Ingegneria dell’Università degli Studi di Roma “La Sapienza”, “Sistemi a finiti e infiniti gradi di libertà.”
- 2001. MURST, Progetto giovani ricercatori. “Gruppo di Rinormalizzazione e Metastabilità nei Modelli di Spin.”

#### Teaching PhD courses

- 2017–18: “Statistical Mechanics,” Dottorato di Ricerca in Meccanica Teorica e Applicata, Sapienza Università di Roma.
- 2016–17: “Statistical Mechanics,” Dottorato di Ricerca in Meccanica Teorica e Applicata, Sapienza Università di Roma.
- 2014–15: “Statistical Mechanics,” Dottorato di Ricerca in Meccanica Teorica e Applicata, Sapienza Università di Roma.

- 2001. Gruppo nazionale per la Fisica Matematica (GNFM), “Aspetti statici e dinamici della transizioni di fase.”

#### Participant to research projects

- 2021. Progetto Ricerca Sapienza “Linear and nonlinear mathematical models: asymptotics in materials with memory, biostructures and composites.” Coordinator: prof. Sandra Carillo. (RM12117A8B4ACF99)
- 2020. Progetto Ricerca Sapienza “Linear and nonlinear mathematical models: asymptotics in materials with memory, biostructures and composites.” Coordinator: prof. Sandra Carillo. (RM120172B9C840B5)
- 2020. Progetto Sapienza Medie Attrezzature “Metamaterials with Tunable Hybrid Phonon Polaritons for Infrared Radiation Managing.” Coordinator: prof. M.C. Larciprete. (MA320172B9543E7F)
- 2019. Progetto Ricerca Sapienza “Trattamento dell’incertezza: identificabilità, campi aleatori.” Coordinator: prof. Barbara Vantaggi. (RM11916B76093AAA)
- 2018. Progetto Sapienza Grandi Attrezzature “A state-of-the art TEM-based platform for advanced Imaging and Diffraction Analyses – TEMIDA.” Coordinator: prof. Marco Rossi. (GA118164932BD7C0)
- 2016. Progetto Ricerca Sapienza “Asymptotical methods in linear and nonlinear evolution problems.” Coordinator: prof. S. Carillo.
- 2015. Grandi Ricerche Universitarie Sapienza. “Asymptotics of inhomogeneous diffusion problems.” Coordinator: prof. D. Andreucci.
- 2012. PRIN “Problemi matematici in teoria cinetica e applicazioni” (36 months). Coordinator: prof. Mario Pulvirenti.
- 2011. Stochastic Theoretical and Applied Research proposal 2011, Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO) project. “Metastable and cut-off behavior of stochastic processes.” Principal investigator: F.R. Nardi.
- 2011. Ateneo di Sapienza Università di Roma denominato “Low Dose Positron Emission Tomography;” coordinator: Prof. Riccardo Faccini.
- 2011. Ricerca Universitario di Sapienza Università di Roma, “Sistemi dinamici classici e quantistici.” Coordinator: Prof. Carlo Marchioro.
- 2010. Ricerca Universitario di Sapienza Università di Roma, “Evoluzione deterministica e stocastica di sistemi a molte componenti in fisica matematica ed applicazioni.” Coordinator: Prof. C. Boldrighini.
- 2009. PRIN “Analisi asintotiche di sistemi classici e quantistici nelle Teorie Cinetiche” (24 months). Coordinator: prof. Mario Pulvirenti.
- 2009. Ateneo Federato di Scienza e della Tecnologia dell’Università degli Studi di Roma “La Sapienza”, “Modelli continui per materiali eterogenei: applicazioni allo studio di mezzi porosi e fratturati.” Coordinator: dott. Giulio Sciarra.
- 2009. Ricerca Universitario Sapienza Università di Roma “Comportamento macroscopico di sistemi a molte componenti.” Coordinator: Prof. C. Boldrighini.
- 2008. CNR, “Modelli poromeccanici dei processi di liquefazione dei suoli.” Coordinator: dott. Giulio Sciarra.
- 2008. Ricerca Universitario Sapienza Università di Roma, “Sistemi a molte componenti con evoluzione deterministica e stocastica.” Coordinator: Prof. C. Boldrighini.
- 2008. Grandi attrezzature Sapienza Università di Roma, “Infrastrutture di rete e macchine per il calcolo scientifico.” Coordinator: Prof. Romano Scozzafava.
- 2007. Ricerca Universitario Sapienza Università di Roma, “Sistemi a molte componenti con evoluzione deterministica e stocastica.” Coordinator: Prof. C. Boldrighini.
- 2006. Ateneo dell’Università degli Studi di Roma “La Sapienza”, “Sistemi a molte componenti con evoluzione deterministica e stocastica (continuazione).” Coordinator: Prof. C. Boldrighini.
- 2006. PRIN, “Comportamento cinetico ed idrodinamico di sistemi complessi classici e quantistici” (24 months). Coordinator: Prof. Carlo Cercignani.
- 2005. Ateneo dell’Università degli Studi di Roma “La Sapienza”, “Sistemi a molte componenti con evoluzione deterministica e stocastica.” Coordinator: Prof. C. Boldrighini.
- 2005. Grandi attrezzature dell’Università degli Studi di Roma “La Sapienza”, “Cluster per il calcolo e dispositivi di rete.” Coordinator: Prof. Alessandro Bichara.
- 2004–05. PRIN, “Sistemi a numero infinito di gradi di libertà classici, quantistici, stocastici” (24 months). Coordinator: Prof. Giovanni Jona Lasinio.
- 2004. Progetto d’Ateneo dell’Università degli Studi di Roma “La Sapienza”, “Metodi matematici per lo studio di proprietà macroscopiche.” Coordinator: Prof. V. Nesi.
- 2003. Progetto d’Ateneo dell’Università degli Studi di Roma “La Sapienza”, “Equazioni alle derivate parziali classiche e stocastiche in teoria dei materiali compositi, biomatematica, meccanica classica dei continui e meccanica quantistica.” Coordinator: Prof. V. Nesi.
- 2002. PRIN, “Sistemi dinamici classici, quantistici e stocastici” (24 months). Coordinator: Prof. Giovanni Jona Lasinio.
- 2002. Ateneo dell’Università degli Studi di Roma “La Sapienza”, “Metodi asintotici in equazioni alle derivate parziali” (C26A018988). Coordinator: Prof. V. Nesi.
- 2001. Ateneo dell’Università degli Studi di Roma “La Sapienza”, “Metodi asintotici in equazioni alle derivate parziali in dimensione finita o infinita” (C26A018988). Coordinator: Prof. Gianfausto dell’Antonio.
- 2001. Progetto della Facoltà d’Ingegneria dell’Università degli Studi di Roma “La Sapienza”,

“Operatori di aggregazione, integrali monotoni, misure fuzzy.” (C26F015751) Coordinator: Prof. Pietro Benvenuti.

- 2000–01. MIUR, “Sistemi dinamici classici, quantistici e stocastici.” Coordinator: Prof. Giovanni Jona Lasinio.
- 1998–99. MURST, “Studio di sistemi dinamici classici, quantistici e stocastici con i metodi della fisica teorica, della fisica matematica e della simulazione numerica.” Coordinator: Prof. Giovanni Jona Lasinio.

### Third mission

- Member of the project “Il fascino della Matematica e delle sue Applicazioni” of the Dipartimento di Scienze di Base e Applicate per l’Ingegneria founded within the 2020 Third Mission call of Sapienza Università di Roma.
- Editor of the book “Il fascino della Matematica e delle sue Applicazioni”, ISBN 978–88–95706–54–2, Edizioni CompoMat S.r.l., Configni (Ri), 2021, published in the framework of the project “Il fascino della Matematica e delle sue Applicazioni”.

### Conference and seminar organization

- Member of the Scientific Advisory Committee of the seminars “A spring/summer/autumn/winter day in probability and statistical physics”. Università di Firenze, starting from May 26th, 2017.
- Member of the Organizing Committee of the workshop “Probabilistic/Synchronous/Random Cellular Automata”, 10–14 June 2013 at Eurandom (TU Eindhoven, Mathematics and Computer Science Department), Eindhoven, The Netherlands.
- Organizer of the Minisimposio “Phase transitions and growth phenomena” at SIMAI 2010, June 21, 2010 – June 25, 2010, Cagliari.

### Some talks

- Introduction to Complex Systems, January 27, 2021, Mathematics Department, Utrecht University, The Netherlands. “Lattice models for the dynamics of pedestrians”
- Equilibrium and Non-equilibrium Statistical Mechanics, a conference in honor of F. Dunlop, April 8–10 2019, Villa Finaly, Firenze, Italy. “Microscopic stochastic particle models for Fick and Fokker–Planck diffusion equations.”
- Karlstad Applied Analysis Seminar (KAAS), Karlstads Universitet, Karlstad, Sweden, 13th March, 2019, “Microscopic models for Fick and Fokker–Planck diffusion equations.”
- Karlstad Applied Analysis Seminar (KAAS), Karlstads Universitet, Karlstad, Sweden, 21st March, 2018, “Lattice models for particle flow through obstacles.”
- Seminar Series in Probability and Statistics, Applied Mathematics Department, TU Delft, The Netherlands, 4th July, 2017, “Particle-based modelling of flows through obstacles.”

- ICMS Complexity Science Winter School, TU Eindhoven, February 13–17 2017, The Netherlands. “Obstacle induced particle jamming in exclusion dynamics.”
- Mathematics of kinetically constrained dynamics and metastability, 4–8 January 2016, Warwick, UK. “Exit time in presence of multiple metastable states.”
- Institute for Complex Molecular Systems, Eindhoven, The Netherlands, June 17th, 2014, “Effects of cooperation on pedestrian motion in dark.”
- Eurandom, Eindhoven, The Netherlands, June 10th, 2013, “Metastable behavior of reversible Probabilistic Cellular Automata.”
- Department of Mathematics, Delft, The Netherlands, March 20th, 2013, “Multiple metastable states in Blume–Capel model.”
- Analysis, modeling, and simulation of collective dynamics: from bacteria to crowds, July 9–13, 2012, CISM, Udine, Italy. “A lattice model for the dynamics of pedestrians in regions with no visibility.”
- The expanding art of expansions, February 14–17, 2012, Eurandom, Eindhoven, The Netherlands. “Graded Cluster Expansion.”
- Mathematics and ICMS seminar on particle systems, Department of Mathematics and Computer Science, February 10th, 2012, TUE, Eindhoven, The Netherlands. “Monte Carlo study of gating and selection in potassium channels.”
- Marc Kac Seminar, February 3rd, 2012, Utrecht, The Netherlands. “Metastable states in Probabilistic Cellular Automata.”
- Sviluppi recenti in fisica matematica, 11–12 febbraio 2009, L’Aquila. “Stati metastabili in competizione in un automa cellulare probabilistico.”
- SIMAI 9th Congress, 15th September, 2008, Roma, Italy. “Competitive nucleation in metastable systems.”
- Eurandom, January 10th, 2008, Eindhoven, The Netherlands, “Metastable behavior of reversible Probabilistic Cellular Automata with self-interaction.”
- Eurandom, June 12th, 2007, Eindhoven, The Netherlands, “Decay of correlations in disordered systems.”
- Meeting Phasenübergänge, June 20th – 26th, 2004, Oberwolfach (Germany). “Graded cluster expansion for renormalized systems.”
- Assemblea scientifica G.N.F.M., 17–19 Febbraio 2003, Montecatini. “Gruppo di rinormalizzazione e sistemi disordinati.”
- Dynamical Systems: Classical, Quantum and Stochastic, September 14–19, 2002, Serra degli Alimini, Otranto, Italy. “Disordered systems and weak gibbsianess of renormalized measures.”
- Ciclo di seminari di Fisica Matematica, Dipartimento di Matematica, Università degli studi di Roma “Tor Vergata”, 18 Febbraio 2002, “Misure di Gibbs e Gruppo di Rinormalizzazione.”

- Ciclo di seminari INFN, Dipartimento di Fisica, Università degli studi di Bari, 29 Gennaio 2002, “Misure di Gibbs e Gruppo di Rinormalizzazione.”
- Seminars of the Theoretical Physics Division, University of Helsinki, 22<sup>th</sup> March, 2001. “Metastability in spin systems and Probabilistic Cellular Automata.”
- Dipartimento di Matematica, Università L’Aquila, L’Aquila, Gennaio, 2000, “Percolazione ricorsiva in tre dimensioni.”
- Mathematics Department, Imperial College, London, May 22<sup>nd</sup>, 1999, “Finite size scaling in three dimensional bootstrap percolation.”
- Séminaires de Probabilité, Marseille, 2 Avril 1999, “Three dimensional bootstrap percolation: the finite size scaling.”
- Ciclo di seminari INFN, Bari, Dicembre 1998, “Effetti di scala finita in un modello di bootstrap percolation.”
- Macroscopic stochastic fluctuations: Equilibrium and non-equilibrium, September 9 – 15, 1998, Vulcano, Italy. “Finite size scaling in three dimensional bootstrap percolation.”
- Séminaires de Probabilité, Marseille, 22 Mai 1998, “Metastable states in finite volume spin systems.”
- Ciclo di seminari INFN, Bari, 12 Maggio 1998, “Metastabilità nei modelli di spin e negli Automi Cellulari Probabilistici.”
- Séminaires de Probabilité et Statistique, Orsay (Paris), 5 Mars 1998, “Competing metastable states.”
- Inhomogeneous random systems, non-gibbsian states, Wulff shapes, 28 – 29 January 1997, Ecole Polytechnique, Palaiseau, Paris, “Metastability in the Ising Model with free boundary conditions.”
- Workshop I.N.d.A.M. “Mathematical problems in the statistical mechanics of interfaces”, 9 – 15 June 1996, Cortona (Ar), Italy, “Competing metastable states.”
- Ciclo di seminari INFN, Bari, 5 Giugno 1996, “Stati metastabili in competizione.”
- Convegno informale di Meccanica Statistica, 23 – 24 Giugno 1995, Parma, “Meccanismi di nucleazione della fase stabile nel modello di Blume–Capel.”

#### Editing activity

- Editor of the book “Il fascino della Matematica e delle sue Applicazioni”, eds. A.M. Bersani, R. Capitanelli, E.N.M. Cirillo, C. Ricciuti, B. Vantaggi, ISBN 978–88–95706–54–2, Edizioni CompoMat S.r.l., Configni (Ri), 2021.
- Associate editor of the book “Probabilistic Cellular Automata – Theory, Applications and Future Perspectives,” main eds. P.–Y. Louis and F.R. Nardi, associate eds. Emilio N.M. Cirillo. N. Fatés, R. Fernández, R.M.H. Merks, W.R. Ruzsel, C. Spitoni, DOI 10.1007/978–3–319–65558–1, Springer International Publishing, 2018.
- Editor of the book “Complementi alle Lezioni di Meccanica Razionale” di T. Levi–Civita e U. Amaldi, eds. E.N.M. Cirillo, G. Maschio, G. Saccomandi e T. Ruggeri, Edizioni Compomat, Configni, Italia, 2012, ISBN 978–88–95706–31–3 e ISBN 978–88–95706–33–7.
- Reviewer and referee for several scientific journals.
- Translation from English to Italian: Neil A. Weiss, “Calcolo delle probabilità” (Pearson Education Italia, 2008).
- Editing: John R. Taylor, “Meccanica classica” (Zanichelli, Bologna, 2006).
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