Curriculum Vitae et Studiorum

Carlo Bianca

Full Professor (PhD, HDR)
Department of Mathematics
eFrei Research Lab
Paris-Panthéon-Assas University
30/32 Avenue de la République
94800 Villejuif, France
Email: **carlo.bianca@efrei.fr**
HomePage: **carlobianca.fr**

Personal Data

First Name	Carlo
Last Name	Bianca
Date of Birth	September 22, 1980
Place of Birth	Catania, Italy
Nationality	Italian

Employment

Jan 23 - Present	Full Professor (PhD, HDR)
Affiliation	Department of Mathematics, eFrei Research Lab, Paris-Panthéon-Assas University, Villejuif, France
Sep 18 - Nov 22	Preparatory Cycle Manager and Director (ECAM-EPMI)
Sep 16 - Nov 22	Full Professor, HDR
Affiliation	Laboratoire Quartz (EA 7393), Laboratoire de Recherche en Eco-innovation Industrielle et Energétique, ECAM-EPMI/CY Cergy-Paris University, Cergy Pontoise, France Member of the research group "Automatique Non-linéaire et Énergies Renouvelables (ANLER)"
Sep 16 - PRESENT	Member of "Licence de Mathematique" Sorbonne Université (UPMC Paris 06), France
Sep 16 - Jun 18	Principal Investigator **DGA Project:** **"Conception d'un réseau de surveillance de la pollution de l'air d'un site sensible"** **Direction Générale de l'Armement (DGA), Ministère de la Défense, France**
Sep 15 - Aug 16	Temporary Associate Professor (ATER-UPMC), HDR
Affiliation	Laboratoire de Physique Statistique, Ecole Normale Supérieure, Paris, France

JAN 14 - AUG 15	Research Fellow **ANR T-KiNeT Project:** **"Modulation Thermique el Lecture Fluorescence/Raman pour l'Analyse Cinétique de Réseaux de Réactions Chimiques/Biologiques",**
AFFILIATION	Laboratoire de Physique Théorique de la Matière Condensée, Sorbonne Universités (UPMC Paris 06), France
JAN 10 - DEC 13	Research Fellow **MIUR-FIRB project RBID08PP3J:** **"Metodi Matematici e Relativi Strumenti per la Modellizzazione e la Simulazione della Formazione di Tumori, Competizione con il Sistema Immunitario e Conseguenti Suggerimenti Terapeutici",**
AFFILIATION	Department of Mathematics, Politecnico of Turin, Italy
JAN 09 - DEC 10	Research Fellow **CoFinanced by Compagnia di San Paolo, Turin-Project:** **"Modelli Matematici nella Ricerca sui Tumori",**
AFFILIATION	Department of Mathematics, Politecnico of Turin, Italy
JAN 09 - DEC 09	Research Fellow **EU-Project FP7-HEALTH-F4-2008-202047:** **"RESOLVE: Resolve Chronic Inflammation and Achieve Healthy Ageing by Understanding Non-regenerative Repair ",** **http://resolve.punkt-international.eu/**
AFFILIATION	Department of Mathematics, Politecnico of Turin, Italy
29TH MAY 08 - 31ST DEC 08	Research Fellow, **EU-Project FP6-IST-4-2004-028069:** **"The European Virtual Human Immune System Project",** **http://www.immunogrid.org/**
AFFILIATION	Department of Mathematics & Computer Science, University of Catania, Italy
JAN 05 - DEC 07	Ph.D. Student **Grant Financed by Lagrange-CRT foundation** **http://www.progettolagrange.it/**
PH. D. COURSE	Mathematics for Engineering Sciences
AFFILIATION	Department of Mathematics, Politecnico of Turin, Italy

EDUCATION

FEB 16	Qualification Professeur des Universités (Full Professor), France
SECTION	*26: Mathématiques Appliquées et Applications des Mathématiques* *29: Constituants Elémentaires, 30: Milieux Dilués et Optique*
3ND DEC 15	Habilitation à Diriger des Recherches (HDR) Sorbonne Université (Pierre and Marie Curie), Paris, France
3ND DEC 13	Habilitation *Associate Professor*, Italy
SECTION	*01/A4: Mathematical Physics*

5TH FEB 13	Qualification à *Maître de Conférences*, France
SECTION	*26: Mathématiques Appliquées et Applications des Mathématiques*
12TH - 16TH JUNE 09	Intensive Course: *"Mathematical Tools Towards the Modelling of Complex Living Systems"*,
ORGANIZED BY	Granada University, Postgrado-Máster en Física y Matemáticas (Fisymat)
29TH SEP 08 - 6TH OCT 08	Intensive Course: *"Formazione sul Calcolo Parallelo ad Alte Prestazioni"*
ORGANIZED BY	INAF, INFN, COMETA, CINECA
2008	Ph.D. in Mathematics for Engineering Science (XX-ciclo)
AFFILIATION	Department of Mathematics, Politecnico of Turin, Italy
PH.D. DISSERTATION	*"Chaotic and Polygonal Billiards as Model of Mass Transport in Microporous Media"*
SUPERVISOR	Prof. Lamberto Rondoni, Professor of Mathematical Physics, Politecnico of Turin, Italy
1ST AUG 04 - 4TH SEP 04	Summer Course in Mathematics: SMI "*Scuola Matematica Interuniversitaria*", **http://www.matapp.unimib.it/smi/**
ORGANIZED BY	INDAM, MIUR, UNESCO ROSTE (Venice)
AFFILIATION	University of Perugia, Italy
COURSES	Complex Analysis, Differential Equations in Mathematical Physics
6TH APR 04	Master Degree in Mathematics, University of Catania, Italy
FINAL DEGREE MARK	Magna cum Laude
TITLE OF THESIS	*"The Boltzmann equation: Theory and Monte Carlo Methods"*
SUPERVISOR	Prof. Giovanni Russo, Professor of Numerical Analysis, University of Catania, Italy,
16TH JULY 1999	Geometric Technical Diploma
EXAMINATION MARK	100 (out of 100)
HIGH SCHOOL	Istituto Tecnico per Geometri "G.B. Vaccarini", Catania, Italy

LANGUAGES

ITALIAN	Mother tongue
ENGLISH	First certificate of proficiency: "International English Language Testing System (IELTS)"
FRENCH	Courant
SPANISH	Intermediate level

COMPUTER SKILLS

SYSTEMS	Windows, Unix
SKILLS	Parallel Computing, Fortran, Python, Matlab, Mathematica, C++, Latex

TEACHING ACTIVITY

JAN 23 - PRESENT	"Linear Algebra", Ingénieur PGE-L1, Assistant (in French) "Data Analysis", Ingénieur PGE-L2, Assistant (in French) "Mathematical Modeling", Ingénieur PGE-L2, Lecture (in French) "Graph Theory", Ingénieur PGE-L3, Assistant (in French) "Operations Research", Ingénieur PGE-L3, Assistant (in English) "Matrix Calculus", Ingénieur PEX-B1, Lecture (in French) "Applied Mathematics", Ingénieur PEX-B1, Assistant (in French)
AFFILIATION	Efrei, Paris-Panthéon-Assas University, France
SEP 16 - NOV 22	"Mathematical Analysis I", Ingénieur généraliste 1AP, Lecture (in French) "Algebra I", Ingénieur généraliste 1AP, Lecture (in French) "Geometry I", Ingénieur généraliste 1AP, Lecture (in French)
SEP 20 - NOV 22	"TIPE Projects", Ingénieur généraliste 1AP-2AP, Manager (in English)
AFFILIATION	ECAM-EPMI, Cergy Pontoise, France
SEP 20 - JUL 21	"Mathematical Analysis II", Ingénieur généraliste 2AP, Lecture (in French) "Algebra II", Ingénieur généraliste 2AP, Lecture (in French) "Geometry II", Ingénieur généraliste 2AP, Lecture (in French) "TIPE Projects", Ingénieur généraliste 1AP-2AP, Manager (in English)
AFFILIATION	ECAM-EPMI, Cergy Pontoise, France
SEP 17 - DEC 2018	"Introduction to Mathematica", Licence 1, Lecture (in French) "Séries de fonctions et intégrales dépendant d'un paramètre", Licence 2, Teaching assistant (in French)
AFFILIATION	Pierre and Marie Curie University, Paris, France
SEP 16 - AUG 17	"Introduction to Mathematica", Licence 1, Lecture (in French) "Calculus", Licence 1, Teaching assistant (in French) "Physics of Continuous Media", Licence 3, Teaching assistant (in French)
AFFILIATION	Pierre and Marie Curie University, Paris, France
SEP 15 - AUG 16	"Introduction to Mathematica", Licence 1, Lecture (in French) "Concepts and Methods of Physics", Licence 1, Teaching assistant (in French) "Physics of Continuous Media", Licence 3, Teaching assistant (in French) "Thermodynamics and Introduction to Statistical Physics", Licence 3, Teaching assistant (in French)
AFFILIATION	Pierre and Marie Curie University, Paris, France
SEP 13 - JAN 14	Teaching assistant in "Mathematical Analysis I", Engineering students (Prof. Luisa Mazzi),
AFFILIATION	Politecnico of Turin, Italy
OCT 13 - JAN 14	Teaching assistant in "Calculus" (In English), Architecture students (Prof. Jacobo Pejsachowicz),
AFFILIATION	Politecnico of Turin, Italy
FEB 13 - JUN 13	Lecture in "Mathematical and Statistical Models", Sustainability Design students,
AFFILIATION	Politecnico of Turin, Italy

Sep 12 - Jan 13	Teaching assistant in "Mathematical Analysis I", Engineering students (Prof. Luisa Mazzi),
Affiliation	Politecnico of Turin, Italy
Mar 12 - Jun 12	Teaching assistant in "Calculus", Territorial, Urban, Environmental and Landscape Planning students (Prof. Roberto Monaco),
Affiliation	Politecnico of Turin, Italy
Oct 11 - Jan 12	Teaching assistant in "Mathematical Analysis I", Aerospace Engineering students (Prof. Luisa Mazzi),
Affiliation	Politecnico of Turin, Italy
Mar 11 - Jun 11	Locum Teacher in "Calculus", Territorial, Urban, Environmental and Landscape Planning students (Prof. Claudio Tebaldi),
Affiliation	Politecnico of Turin, Italy
Feb 11	Teacher in "Matematics",
Affiliation	High School "Convitto Nazionale Umberto I", Turin, Italy
Sep 09 - Jan 10	Teaching assistant in "Laboratory of Mathematical Physics", Electronic Engineering students,
Affiliation	Politecnico of Turin, Italy
Sep 09 - Dec 09	Teaching assistant in "Equations of Mathematical Physics", Mathematical Modelling in Engineering students
Affiliation	Politecnico of Turin, Italy
Sep 09 - Dec 09	Teaching assistant in "Mathematical Analysis I", Technology and International Business students (Prof. Luisa Mazzi),
Affiliation	Politecnico of Turin, Italy
Mar 09 - June 09	Teaching assistant in "Geometry", Environmental Engineering students (Prof. Giulio Tedeschi),
Affiliation	Politecnico of Turin, Italy
25th Jan 08 - 16th Feb 08	Teacher in "Matematics"
Affiliation	High School "Bodoni-Paravia", Turin, Italy
Sep 07 - Dec 07	Teaching assistant in "Mathematical Analysis I", Aerospace Engineering students (Prof. Andrea Bacciotti), Biomedical Engineering students (Prof. Andrea Bacciotti), Chemical Engineering students (Prof. Andrea Bacciotti), Electrical Engineering students (Prof. Andrea Bacciotti), Energy Engineering students (Prof. Andrea Bacciotti), Mechanical Engineering students (Prof. Andrea Bacciotti),
Affiliation	Politecnico of Turin, Italy

SEP 06 - DEC 06 Teaching assistant in "Mathematical Analysis I",
Aerospace Engineering students (Prof. Andrea Bacciotti),
Biomedical Engineering students (Prof. Andrea Bacciotti),
Chemical Engineering students (Prof. Andrea Bacciotti),
Electrical Engineering students (Prof. Andrea Bacciotti),
Energy Engineering students (Prof. Andrea Bacciotti),
Mechanical Engineering students (Prof. Andrea Bacciotti),

AFFILIATION Politecnico of Turin, Italy

NOV 05 - JAN 06 Teaching assistant in "Mathematical Analysis II",
Computer Science Engineering students (Prof. Paolo Tilli),
Electronic Engineering students (Prof. Paolo Tilli),
Physical Engineering students (Prof. Paolo Tilli),
Telecomunication Engineering students (Prof. Paolo Tilli),

AFFILIATION Politecnico of Turin, Italy

PRESENT RESEARCH INTERESTS

1 **Mathematical Modelling of Living Systems**:
Biological and Chemical Systems, Traffic and Crowds Dynamics, Economic Systems
Renewable Energy Sources Network

2 **Nonequilibrium Statistical Mechanics and Dynamical Systems:**
Billiard Theory, Chaos, Hopf Bifurcations, Transport in Microporous Media,
Fluctuations, Cross-Correlation Functions, Information Theory

3 **Numerical Methods for Kinetic Equations**
Particle Methods, Monte Carlo Methods, MWF Method

4 **Inverse Problems in Engineering**
Source Localization, Signal Reconstruction, Renormalization in Field Theory

AWARDS

2010 **INDAM-SIMAI Prize:**
Best Italian Ph.D. Dissertation - Period 2007-2009.

SCIENTIFIC COMMUNICATIONS AND CONFERENCES

18TH DEC 19 **Communication** at the Conference:
"6th International Conference on Energy and City of the Future",
Pune, India

TITLE "A thermostatted model for a network of energy sources:
Analysis on the initial condition"

5TH DEC 18 **Communication** at the Conference:
"2018 IEEE International Conference on Bioinformatics and Biomedicine (BIBM)",
Madrid, Spain

TITLE "Optimal control in a mathematical model for tumor escape"

26TH OCT 18 **Communication** at the Conference:
"4th International Symposium Energy and City of the Future",
Fès, Maroc

TITLE "On the urban development of a city: A Fokker-Planck approach"

25TH JUL 18 **Communication** at the Conference:
"31st International Symposium on Rarefied Gas Dynamics",
Glasgow, United Kingdom
TITLE "Thermostatted kinetic theory approach to the competition between cancer and immune system cells in an inhomogenous system"

25TH MAY 18 **Communication** at the Conference:
"Journées Théorie, Modélisation et Simulation",
ENS, Paris, France
TITLE "On the effect of learning control in the competition between cancer cells and immune system cells"

13TH NOV 17 **Communication** at the Conference:
"2017 IEEE International Conference on Bioinformatics and Biomedicine (BIBM)",
Kansas City, MO, USA
TITLE "Tumor escape: A mathematical model"

19TH FEB 15 **Invited Speaker** at the Conference: "MATHMOD 2015",
University of Technology, Vienna, Austria
TITLE "Reaction-diffusion approach to somite formation"

18TH FEB 15 **Invited Speaker** at the Conference: "MATHMOD 2015",
University of Technology, Vienna, Austria
TITLE "Multiscale Analysis of a Retarded Equation:
From Kinetic to Macroscopic Scale"

26TH NOV 14 **Invited Speaker** at Laboratoire de Physique Statistique,
École Normale Supérieure de Paris, Paris, France
TITLE "Cancer-Tissue Evolution from Cell-Cell Interactions:
From Kinetic to Macroscopic equations"

26ND - 8TH NOV 14 **Speaker** at the Conference: "BIOMAT 2014",
14th International Symposium on Mathematical and Computational Biology,
Stefan Banach International Mathematical Center, Bedlewo, Poland
TITLE "From Cellular to Tissue Scales by Asymptotic Limits of
Thermostatted Kinetic Models"

7TH - 10TH JUL 14 **Communication** at the Conference: "SIMAI 2014",
Hotel Villa Diodoro, Taormina, Italy
TITLE "Multiscale Modelling of Living Systems: A Mathematical
and Computational Perspective"

14TH OCT 13 **Invited Speaker** at Laboratoire de Physique Théorique de la Matièere
Condensée: Sorbonne et PMC Universités, Paris, France
TITLE "Mathematical Modeling of Physical and Biological Systems:
Transport, Tumor Growth and Immune System Competition"

19TH JUN 13 **Invited Speaker** at SUTD/MIT:
Singapore, Malay Peninsula
TITLE "Mathematical Modelling of Life Science Systems: Chaos,
Complexity, Thermostats and Simulations"

21TH - 27TH SEP 13 **Communication** at the Conference:
"*The 11th International Conference of Numerical Analysis and Applied Mathematics, ICNAAM 2011*", Rhodes, Greece
TITLE "Persistence Analysis in a Kolmogorov-Type Model for Cancer-Immune System Competition"

21ST JUN 12 **Invited Speaker** at the Scientific Meeting:
"*Journée Scientifique sur les Equations Cinétiques*", (Prof. L. Desvillettes)
Centre de Mathématiques et de Leurs Applications
Ecole Normale Supérieure de Cachan, Paris, France
TITLE "A Kinetic for Active Particles Model for Virulent Keloid Formation "

4TH - 6TH JUN 12 **Invited Speaker** at the Workshop:
"*Mathways into Cancer*", Almagro, Ciudad Real, Spain
TITLE "Triplex Vaccine in Mammary Carcinoma: A Mathematical Model in Tune with SimTriplex"

30TH NOV - 2ND DEC 11 **Speaker** at the CIMAB & GASVA SIMAI Workshop:
"*Young Researcher Workshop on Theoretical Approaches and Related Mathematical Methods in Biology and Medicine*", L'Aquila, Italy
TITLE "Kinetic Modelling for Keloid Genesis: The Parameters Role on the Moments Evolution"

19TH - 25TH SEP 11 **Communication** at the Conference:
"*The 9th International Conference of Numerical Analysis and Applied Mathematics, ICNAAM 2011*", Halkidiki, Greece
TITLE "Immune System Network and Cancer Vaccine"

26TH - 30TH JUN 11 **Communication** at the Conference:
"*The 11th International Conference on Computational and Mathematical Methods in Science and Engineering, CMMSE 2011*", Alicante, Spain
TITLE "The MWF Method for Kinetic Models: An Overview and Research Perspective"

26TH - 30TH JUN 11 **Communication** at the Conference:
"*The 11th International Conference on Computational and Mathematical Methods in Science and Engineering, CMMSE 2011*", Alicante, Spain
TITLE "Compartmental Mathematical Modeling of Immune System Melanoma Competition"

8TH APR 11 **Invited Speaker** at the SIMAI Workshop:
"*Prospettive di Sviluppo della Matematica Applicata in Italia 2011, In memoria di Vinicio Boffi*", Rome, Italy
TITLE "Mathematical Modelling in Medicine and Biology: Chaos, Complexity, and Transport"

28TH SEPT 10 **Speaker** at the Conference:
"Fifth China-Italy Colloquium on Applied Mathematics",
Park Hotel Capomulini, Acireale (CT), Italy
TITLE "A Cellular Scale Based Model for the Keloid Formation and Malignant Effects"

26TH - 30TH JUN 10 **Communication** at the Conference:
"*The 10th International Conference on Computational and Mathematical Methods in Science and Engineering, CMMSE 2010*", Almeria, Spain
TITLE "Modeling Artificial Immunity Against Mammary Carcinoma"

24TH JUNE 10 **Speaker** at the Conference: "The 10th Congress of SIMAI",
Faculty of Architecture, University of Cagliari, Italy
TITLE "A Kinetic Model for the Keloid Genesis:
Malignant Effects and Immune System Response"

21ST JUNE 10 **Speaker** at the Conference: "The 10th Congress of SIMAI",
Faculty of Architecture, University of Cagliari, Italy
TITLE "Genetic Mutations and Immune System Competition"

21ST - 22ND MAY 10 **Invited Speaker** at the Scientific Meeting:
"Complexity in Life and Socio-Economic Sciences",
Department of Mathematics, University of Bologna, Italy
TITLE "A Kinetic for the Keloid Formation Triggered by Virus:
Malignant Effects and Immune System Competition"

15TH APR 10 **Invited Speaker** at the "*Third Annual Consortium Meeeting* RESOLVE",
Hotel Saray, Granada, Spain
TITLE "Kinetic of Active Particles Models for Wound Healing Diseases:
Malignant Effects and Immune System Competition"

29TH JAN 10 **Invited Speaker** at the Scientific Meeting:
"*Complessita in Scienze della Vita e Scienze Socio-economiche*",
Department of Mathematics, Politecnico of Turin, Italy
TITLE "Un Modello Matematico per la Genesi, l'Eterogeneità Genetica di Cellule Mutate e Competizione con il Sistema Immunitario"

17TH - 19TH DEC 09 **Speaker** at the "*White Workshop on Mathematical Biology*", Trento, Italy
TITLE "On the Modelling Genetic Mutations and Immune System Competition by the Kinetic Theory for Active Particles"

9TH OCT 09 **Speaker** at the SIMAI Workshop:
"*Prospettive di Sviluppo della Matematica Applicata in Italia 2009, In memoria di Angelo Marcello Anile*", Rome, Italy
TITLE "Genetic Mutations and Immune System Competition: An Explorative Model from the Mathematical Kinetic Theory for Active Particles"

26TH MAR 09 **Speaker** at the "*Second Annual Consortium Meeeting* RESOLVE",
Faculty of Education, University of Verona, Italy
TITLE "Mathematics Fosters Fibrosis Modelling"

20TH OCT 08 **Invited Speaker,**
Department of Mathematics, University of Bologna, Italy
TITLE "The Nonequilibrium Ehrenfest Gas: a Chaotic Billiard with Polygonal Obstacles?"

3RD - 6TH JUN 08 **Communication** at the Conference:
"The 10th Experimental Chaos Conference",
Faculty of Engineering, University of Catania, Italy

POSTER TITLE "Thermostatted Planar Billiards as Simple Model of Mass Transport in Microporous Membranes"

19TH - 21ST MAY 08 "*CancerSim2008: Euroconference on Modeling and Simulation of Cancer Growth and Therapy*",
Politecnico of Turin, Italy

15TH - 16TH NOV 07 "*Nuove Frontiere della Matematica per le Scienze Applicate*",
University of Ferrara, Italy

18TH - 19TH MAY 07 **Speaker** at the SIMAI Workshop:
"*Prospettive di Sviluppo della Matematica Applicata in Italia 2007*"
Rome, Italy

TITLE "Billiards as Simple Model of Microporous Membranes"

15TH DEC 06 **Speaker** at the "*Ph.D. Day*",
Department of Mathematics, Politecnico of Turin, Italy

TITLE "Periodic Orbits and Chaos of the Nonequilibrium Ehrenfest Wind-Tree Model"

24TH - 27TH MAY 05 "*Recent and Future Developments in Hamiltonian System: Theory and Applications*"
Institute Henry-Poincaré, Paris, France

24TH JUNE 03 **Speaker** at the College of Engineering,
University of Catania, Italy

TITLE "The Heat Equation: Fundamental Solution and Properties"

AFFILIATIONS

JAN 10 - DEC 14 Member of "European Mathematical Society", (EMS)
WEBSITE **http://www.emis.de/**

JAN 10 - DEC 14 Member of "Unione Matematica Italiana", (UMI)
WEBSITE **http://umi.dm.unibo.it/**

JAN 10 - PRESENT Member of "Centro Interuniversitario per la Matematica Applicata a Biologia, Medicina ed Ambiente ", (CIMAB)
WEBSITE **http://www.mat.unimi.it/users/CIMAB/**

JAN 06 - DEC 14 Member of "Gruppo Nazionale della Fisica Matematica", (GNFM)
WEBSITE **http://gruppi.altamatematica.it/gnfm/**

OCT 13 - PRESENT Permanent Member of "Fractional Calculus and Applications Group"
WEBSITE **http://fcag-egypt.com/**

JAN 10 - DEC 13 Member of "Societa' Italiana di Matematica Applicata e Industriale", (SIMAI)
WEBSITE **http://www.simai.eu/**

JAN 06 - DEC 08 Member of "Consorzio Nazionale Interuniversitario per le Scienze Fisiche della Materia", (CNISM)

WEBSITE http://www.cnism.it/

SCIENTIFIC PUBLICATIONS

129. **AUTHORS** G. Morgado, A. Lemarchand, C. Bianca
TITLE *From cell-cell interaction to stochastic and deterministic descriptions of a cancer-immune system competition model*
JOURNAL Mathematics **11** (2023), 2188

128. **AUTHORS** M. Dalla Via, C. Bianca
TITLE *A kinetic theory model for the energy-demand management in a microgrid-macrogrid network*
JOURNAL Communications in Nonlinear Science and Numerical Simulation **119** (2023), 107114

127. **AUTHORS** C. Bianca, M. Menale
TITLE *On the existence of self-similar solutions in the thermostatted kinetic theory with unbounded activity domain*
JOURNAL Mathematics **10** (2022), 1407

126. **AUTHORS** C. Bianca
TITLE *On the modeling of energy-multisource networks by the thermostatted kinetic theory approach: A review with research perspectives*
JOURNAL Energies **15** (2022), 7825

125. **AUTHORS** G. Morgado, L. Masurel, A. Lemarchand, C. Bianca
TITLE *Derivation of macroscopic equations from homogeneous thermostatted kinetic equations in the cancer-immune system competition*
JOURNAL In Mondaini, R.P. (eds) Trends in Biomathematics: Stability and Oscillations in Environmental, Social, and Biological Models. BIOMAT 2021 Springer (2022), 225

124. **AUTHORS** C. Bianca, M. Menale
TITLE *On the initial-boundary-value problem and moments evolution in a thermostatted framework with nonhomogeneous boundary conditions*
JOURNAL Applied Mathematics & Information Sciences **16** (2022), 781-788

123. **AUTHORS** C. Bianca
TITLE *Special issue editorial: Symmetry in nonequilibrium statistical mechanics and dynamical systems*
JOURNAL Symmetry **14** (2022), 1960

122. **AUTHORS** C. Bianca, M. Menale
TITLE *A nonconservative-thermostat kinetic theory framework: Density and linear-momentum evolution*
JOURNAL Applied Mathematics & Information Sciences **16** (2022), 681-687

121. **AUTHORS** C. Bianca
TITLE *Interplay and multiscale modeling of complex biological systems*
JOURNAL AIMS Biophysics **9** (2022), 56-60

120. **AUTHORS** C. Bianca, M. Menale
TITLE *Existence and uniqueness of the weak solution for a space-velocity thermostatted kinetic theory framework*
JOURNAL The European Physical Journal Plus **136** (2021), 243

119. **AUTHORS** L. Masurel, C. Bianca, A. Lemarchand
TITLE *Space-velocity thermostatted kinetic theory model of tumor growth*
JOURNAL Mathematical Biosciences and Engineering **18** (2021), 5525-5551

118. **AUTHORS** C. Bianca, C. Dogbe
TITLE *Regularization and propagation in the heat equation for infinite-dimensional Hilbert spaces*
JOURNAL Nonlinear Studies **28** (2021), 1287-1310

117. **AUTHORS** C. Bianca, M. Menale
TITLE *Multi-active-particle modeling of complex systems within the discrete thermostatted kinetic theory*
JOURNAL Mathematics in Engineering, Science and Aerospace **12** (2021), 1081-1090

116. **AUTHORS** C. Bianca, M. Menale
TITLE *Mathematical analysis of a nonconservative discrete kinetic theory framework with thermostat*
JOURNAL Nonlinear Studies **28** (2021), 903-914

115. **AUTHORS** C. Bianca
TITLE *Mathematical and computational modeling of biological systems: Advances and perspectives*
JOURNAL AIMS Biophysics **8** (2021), 318-321

114. **AUTHORS** C. Bianca, M. Menale
TITLE *Large time behaviour of homogeneous systems in the continuous thermostatted kinetic theory*
JOURNAL Nonlinear Studies **28** (2021), 931-938

113. **AUTHORS** C. Bianca, M. Menale
TITLE *Macroscopic quantities evolution in homogeneous thermostatted kinetic models*
JOURNAL Mathematics in Engineering, Science and Aerospace **12** (2021), 831-843

112. **AUTHORS** M. Dalla Via, C. Bianca, I. El Abbassi, A-M. Darcherif
TITLE *A hybrid thermostatted kinetic framework for the modeling of a hybrid multisource system with storage*
JOURNAL Nonlinear Analysis: Hybrid Systems **38** (2020), 100928

111. **AUTHORS** C. Bianca, B. Carbonaro, M. Menale
TITLE *On the Cauchy problem of vectorial thermostatted kinetic frameworks*
JOURNAL Symmetry **12** (2020), 517

110. **AUTHORS** M. Dalla Via, C. Bianca, I. El Abbassi, A-M. Darcherif
TITLE *On the modeling of a solar, wind and fossil fuel energy source by means of the thermostatted kinetic theory*
JOURNAL The European Physical Journal Plus **135** (2020), 198

109. **AUTHORS** C. Bianca, M. Menale
TITLE *Mathematical analysis of a thermostatted equation with a discrete real activity variable*
JOURNAL Mathematics **8** (2020), 57

108. **AUTHORS** M. Dalla Via, C. Bianca, I. El Abbassi, A-M. Darcherif
TITLE *A thermostatted kinetic theory model for a hybrid multisource system with storage*
JOURNAL Applied Mathematical Modelling **78** (2020), 232-248

107. **AUTHORS** C. Bianca, M. Menale
TITLE *The maximum-entropy-based weight function in discrete-activity-thermostatted models*
JOURNAL Applied Mathematics & Information Sciences **14** (2020), 527-532

106. **AUTHORS** M. Dalla Via, C. Bianca, I. El Abbassi, A-M. Darcherif
TITLE *A thermostatted model for a network of energy sources: Analysis on the initial condition*
JOURNAL E3S Web of Conferences **170** (2020), 01031

105. **AUTHORS** C. Bianca, M. Menale
TITLE *A note on the nonequilibrium stationary state in continuous-activity thermostatted models*
JOURNAL Applied Mathematics & Information Sciences **14** (2020), 755-759

104. **AUTHORS** C. Bianca
TITLE *Theoretical frameworks and models for biological systems*
JOURNAL AIMS Biophysics **7** (2020), 167-168

103. **AUTHORS** C. Bianca, M. Menale
TITLE *On the convergence toward nonequilibrium stationary states in thermostatted kinetic models*
JOURNAL Mathematical Methods in the Applied Sciences **42** (2019), 6624-6634

102. **AUTHORS** C. Bianca, M. Menale
TITLE *On the interaction domain reconstruction in the weighted thermostatted kinetic framework*
JOURNAL The European Physical Journal Plus **134** (2019), 143

101. **AUTHORS** C. Bianca, M. Menale
TITLE *Existence and uniqueness of nonequilibrium stationary solutions in discrete thermostatted models*
JOURNAL Commun Nonlinear Sci Numer Simulat **73** (2019), 25-34

100. **AUTHORS** C. Bianca, C. Dogbe
TITLE *Regularity of entropy solutions to a class of conservation laws*
JOURNAL Nonlinear Studies **26** (2019), 129-157

99. **AUTHORS** C. Bianca, M. Menale
TITLE *A convergence theorem for the nonequilibrium states in the discrete thermostatted kinetic theory*
JOURNAL Mathematics **7** (2019), 673

98. **AUTHORS** L. Masurel, C. Bianca, A. Lemarchand
TITLE *Thermostatted kinetic theory approach to the competition between cancer and immune system cells in an inhomogeneous system*
JOURNAL AIP Conference Proceedings **2131** (2019)

97. **AUTHORS** C. Bianca, M. Dalla Via, C. Dogbe
TITLE *A master equation-based framework for the modeling of pedestrian dynamics*
JOURNAL Mathematics in Engineering, Science and Aerospace **10** (2019), 129-142

96. **AUTHORS** C. Bianca, M. Menale
TITLE *On the weighted interactions in the discrete thermostatted kinetic theory*
JOURNAL Nonlinear Studies **26** (2019), 95-108

95. **AUTHORS** C. Bianca, S. Motta
TITLE *Optimal control in a mathematical model for tumor escape*
JOURNAL IEEE BIBM (2019), 1357-1360

94. **AUTHORS** C. Bianca, C. Mogno
TITLE *A thermostatted kinetic theory model for event-driven pedestrian dynamics*
JOURNAL The European Physical Journal Plus **133** (2018), 213
HIGHLIGHTS https://www.epj.org/epjplus-news/1502-epjplus-highlight-rush-hour-metro-crowd-governed-by-peoples-eagerness-to-go-home
https://www.europhysicsnews.org/highlights

93. **AUTHORS** C. Bianca, C. Mogno
TITLE *Modelling pedestrian dynamics into a metro station by thermostatted kinetic theory methods*
JOURNAL Mathematical and Computer Modelling of Dynamical Systems **24** (2018), 207-235

92. **AUTHORS** L. Masurel, C. Bianca, A. Lemarchand
TITLE *On the learning control effects in the cancer-immune system competition*
JOURNAL Physica A: Statistical Mechanics and its Applications **506** (2018), 462-475

91. **AUTHORS** C. Bianca, C. Mogno
TITLE *Qualitative analysis of a discrete thermostatted kinetic framework modeling complex adaptive systems*
JOURNAL Commun Nonlinear Sci Numer Simulat **54** (2018), 221-232

90. **AUTHORS** C. Bianca, C. Dogbe
TITLE *A new criterium for the ergodicity of Hamilton-Jacobi-Bellman type equations*
JOURNAL Global and Stochastic Analysis **5** (2018), 67-99

89. **AUTHORS** C. Bianca, R. Sasportas, X. Busch
TITLE *A two-dimensional maximum-entropy-based model for the source reconstruction*
TITLE *in a monitoring network*
JOURNAL Nonlinear Studies **25** (2018), 1-13

88. **AUTHORS** C. Bianca, L. Brézin
TITLE *Modeling the antigen recognition by B-cell and T-cell receptors through thermostatted kinetic theory methods*
JOURNAL International Journal of Biomathematics **10** (2017), 1750072

87. **AUTHORS** C. Bianca, C. Dogbe
TITLE *On the existence and uniqueness of invariant measure for multidimensional diffusion processes*
JOURNAL Nonlinear Studies 24 (2017), 437-468

86. **AUTHORS** C. Bianca, R. Sasportas
TITLE *A one-dimensional mathematical model for the source reconstruction by the maximum entropy principle*
JOURNAL Applied Mathematics & Information Sciences 11 (2017), 1803-1809

85. **AUTHORS** C. Bianca, A. Kombargi
TITLE *On the modeling of the stock market evolution by means of the information-thermostatted kinetic theory*
JOURNAL Nonlinear Studies 24 (2017), 935-944

84. **AUTHORS** C. Bianca, G.M. Gallo, S. Motta
TITLE *Tumor escape: A mathematical model*
JOURNAL IEEE BIBM (2017), 1401-1405

83. **AUTHORS** C. Bianca, A. Kombargi
TITLE *On the inverse problem for thermostatted kinetic models with application to the financial market*
JOURNAL Applied Mathematics & Information Sciences 11 (2017), 1463-1471

82. **AUTHORS** C. Bianca
TITLE *A new approach for the source problem based on the maximum entropy principle*
JOURNAL Nonlinear Studies 24 (2017), 715-723

81. **AUTHORS** C. Bianca
TITLE *On the coupling of the thermostatted kinetic theory with the information theory*
JOURNAL Applied Mathematics & Information Sciences 11 (2017), 1767-1772

80. **AUTHORS** M. Ben Amar, C. Bianca
TITLE *Onset of nonlinearity in a stochastic model for auto-chemotactic advancing epithelia*
JOURNAL Nature Scientific Reports **6** (2016), 33849

79. **AUTHORS** C. Bianca, A. Lemarchand
TITLE *Miming the cancer-immune system competition by kinetic Monte Carlo simulations*
JOURNAL Journal of Chemical Physics **145** (2016), 154108

78. **AUTHORS** J. Liu, C. Bianca, L. Guerrini
TITLE *Dynamical analysis of a computer virus model with delays*
JOURNAL Discrete Dynamics in Nature and Society **2016** (2016), 5649584

77. **AUTHORS** M. Ben Amar, C. Bianca
TITLE *Towards a unified approach in the modelling of fibrosis: A review with research perspectives*
JOURNAL Physics of Life Reviews **16** (2016), 61-85

76. **AUTHORS** M. Ben Amar, C. Bianca
TITLE *Multiscale modeling of fibrosis - What's next?*
JOURNAL Physics of Life Reviews **16** (2016), 118-123

75. **AUTHORS** C. Bianca, C. Dogbe
TITLE *Recovering Navier-Stokes equations from asymptotic limits of the Boltzmann gas mixture equation*
JOURNAL Communications in Theoretical Physics **65** (2016), 553-562

74. **AUTHORS** J. Riposo, C. Bianca
TITLE *On the adjacency matrix of graphs: Principal eigenvector versus degree vector*
JOURNAL Nonlinear Studies **23** (2016), 365-378

73. **AUTHORS** C. Bianca, L. Guerrini
TITLE *Loosing stability and exhibiting limit cycle as consequence of time delay introduction into a computer virus infection model*
JOURNAL Global and Stochastic Analysis **3** (2016), 1-10

72. **AUTHORS** B.K. Singh, C. Bianca
TITLE *A new numerical approach for the solutions of partial differential equations in three-dimensional space*
JOURNAL Applied Mathematics & Information Sciences **10** (2016), 1663-1672

71. **AUTHORS** C. Bianca, C. Dogbe, A. Lemarchand
TITLE *From cellular to tissue scales by asymptotic limits of thermostatted kinetic models*
JOURNAL The European Physical Journal Plus **131** (2016), 41

70. **AUTHORS** L. Guerrini, L. Gori, A. Matsumoto, M. Sodini, Z. Zhang, C. Bianca
TITLE *Time delayed equations as models in nature and society*
JOURNAL Discrete Dynamics in Nature and Society **2016** (2016), 1245765

69. **AUTHORS** X.J. Yang, S.T. Mohyud-Din, C. Cattani, C. Bianca, A. Kilicman
TITLE *Special issue on "Fractional calculus and applications"*
JOURNAL Journal of King Saud University - Science **28** (2016), 1-2

68. **AUTHORS** C. Bianca, C. Dogbe
TITLE *On the Boltzmann gas mixture equation: Linking the kinetic and fluid regimes*
JOURNAL Commun Nonlinear Sci Numer Simulat **29** (2015), 240-256

67. **AUTHORS** C. Bianca, A. Lemarchand
TITLE *Evaluation of reaction fluxes in stationary and oscillating far-from-equilibrium biological systems*
JOURNAL Physica A: Statistical Mechanics and its Applications **438** (2015), 1-16

66. **AUTHORS** C. Bianca, L. Guerrini, J. Riposo
TITLE *A delayed mathematical model for the acute inflammatory response to infection*
JOURNAL Applied Mathematics & Information Sciences **9** (2015), 2775-2782

65. **AUTHORS** J. Riposo, C. Bianca
TITLE *On volatility variation in ARCH(1) and GARCH(1,1) continuous limits*
JOURNAL Nonlinear Studies **22** (2015), 359-371

64. **AUTHORS** C. Bianca, J. Riposo
TITLE *Mimic therapeutic actions against keloid by thermostatted kinetic theory methods*
JOURNAL The European Physical Journal Plus **130** (2015), 159

63. **AUTHORS** C. Bianca, A. Lemarchand
TITLE *Density evolution by the low-field limit of kinetic frameworks with thermostat and mutations*
JOURNAL Commun Nonlinear Sci Numer Simulat **20** (2015), 14-23

62. **AUTHORS** C. Bianca, C. Dogbe
TITLE *Mean-field limit of a microscopic individual-based model describing collective motions*
JOURNAL Journal of Nonlinear Mathematical Physics **22** (2015), 117-143

61. **AUTHORS** C. Bianca, C. Dogbe, A. Lemarchand
TITLE *The role of nonconservative interactions in the asymptotic limit of thermostatted kinetic models*
JOURNAL Acta Applicandae Mathematicae **189** (2015), 1-24

60. **AUTHORS** C. Bianca, L. Guerrini
TITLE *Hopf bifurcations in a delayed microscopic model of credit risk contagion*
JOURNAL Applied Mathematics & Information Sciences **9** (2015), 1493-1497

59. **AUTHORS** C. Bianca
TITLE *New research perspectives on thermostatted kinetic models*
JOURNAL Journal of Mathematics and Statistics **11** (2015), 16-20

58. **AUTHORS** C. Bianca, A. Lemarchand
TITLE *Reaction-diffusion approach to somite formation*
JOURNAL IFAC-PapersOnLine (2015), 346-351

57. **AUTHORS** C. Bianca, A. Lemarchand
TITLE *Multiscale analysis of a retarded equation: From kinetic to macroscopic scale*
JOURNAL IFAC-PapersOnLine (2015), 656-660

56. **AUTHORS** C. Bianca, C. Dogbe, A. Lemarchand
TITLE *Onset of hyperbolic macroscopic behavior in complex systems subjected to external agents*
JOURNAL Applied Mathematics & Information Sciences **9** (2015), 2477-2488

55. **AUTHORS** C. Bianca, C. Dogbe
TITLE *Kinetic models coupled with Gaussian thermostats: Macroscopic frameworks*
JOURNAL Nonlinearity **27** (2014), 2771-2803

54. **AUTHORS** C. Bianca, A. Lemarchand
TITLE *Determination of reaction flux from concentration fluctuations near a Hopf bifurcation*
JOURNAL Journal of Chemical Physics **141** (2014), 144102

53. **AUTHORS** C. Bianca, A. Lemarchand
TITLE *Temporal cross-correlation asymmetry and departure from equilibrium in a bistable chemical system*
JOURNAL Journal of Chemical Physics **140** (2014), 224105

52. **AUTHORS** C. Bianca, M. Ferrara, L. Guerrini
TITLE *High-order moments conservation in thermostatted kinetic models*
JOURNAL Journal of Global Optimization **58** (2014), 389-404

51. **AUTHORS** C. Bianca, L. Guerrini, A. Lemarchand
TITLE *Existence of solutions of a partial integro-differential equation with with thermostat and time delay*
JOURNAL Abstract and Applied Analysis **2014** (2014), 463409

50. **AUTHORS** C. Bianca
TITLE *How do mutative events modify moments evolution in thermostatted kinetic models?*
JOURNAL Commun Nonlinear Sci Numer Simulat **19** (2014), 2155-2159

49. **AUTHORS** F. Castiglione, F. Pappalardo, C. Bianca, G. Russo, S. Motta
TITLE *Modeling biology spanning different scales: An open challenge*
JOURNAL BioMed Research International **2014** (2014), 902545

48. **AUTHORS** C. Bianca, L. Guerrini
TITLE *Existence of limit cycles in the Solow model with delayed-logistic population growth*
JOURNAL The Scientific World Journal **2014** (2014), 207806

47. **AUTHORS** C. Bianca, M. Ferrara, L. Guerrini
TITLE *Asymptotic limit of an integro-differential equation modelling complex systems*
JOURNAL Izvestiya: Mathematics **78** (2014), 3-18

46. **AUTHORS** C. Bianca, A. Lemarchand
TITLE *A kinetic framework for modeling nonequilibrium biological and chemical systems*
JOURNAL Nonlinear Studies **21** (2014), 367-374

45. **AUTHORS** C. Bianca, C. Dogbe, L. Guerrini
TITLE *A thermostatted kinetic framework with particle refuge for the modeling of tumor hiding*
JOURNAL Applied Mathematics & Information Sciences **8** (2014), 469-473

44. **AUTHORS** C. Bianca, L. Guerrini, M. Ferrara, C. Udriste
TITLE *Nonlinear Dynamics in Applied Sciences Systems: Advances and Perspectives*
JOURNAL Abstract and Applied Analysis **2014** (2014), 782657

43. **AUTHORS** C. Bianca
TITLE *Existence of stationary solutions in kinetic models with Gaussian thermostats*
JOURNAL Mathematical Methods in the Applied Sciences **36** (2013), 1768-1775

42. **AUTHORS** C. Bianca, L. Guerrini
TITLE *On the Dalgaard-Strulik model with logistic population growth rate and delayed-carrying capacity*
JOURNAL Acta Applicandae Mathematicae **128** (2013), 39-48

41. **AUTHORS** C. Bianca, M. Ferrara and L. Guerrini
TITLE *The time delays effects on the qualitative behavior of an economic growth model*
JOURNAL Abstract and Applied Analysis **2013** (2013), 901014

40. **AUTHORS** C. Bianca
TITLE *Modeling complex systems with particles refuge by thermostatted kinetic theory methods*
JOURNAL Abstract and Applied Analysis **2013** (2013), 152174

39. **AUTHORS** C. Bianca
TITLE *Controllability in hybrid kinetic equations modeling nonequilibrium multicellular systems*
JOURNAL The Scientific World Journal **2013** (2013), 274719

38. **AUTHORS** C. Bianca, M. Ferrara and L. Guerrini
TITLE *Qualitative analysis of a retarded mathematical framework with application to living systems*
JOURNAL Abstract and Applied Analysis **2013** (2013), 736058

37. **AUTHORS** C. Bianca, F. Pappalardo, M. Pennisi, M.A. Ragusa
TITLE *Persistence analysis in a Kolmogorov-type model for cancer immune system competition*
JOURNAL AIP Conference Proceedings **1558** (2013), 1797-1800

36. **AUTHORS** C. Bianca
TITLE *Thermostatted kinetic models: Open problems*
JOURNAL J Appl Computat Math **2** (2013), doi:10.4172/2168-9679.1000e133

35. **AUTHORS** C. Bianca and C. Dogbe
TITLE *A mathematical model for crowd dynamics: Multiscale analysis, fluctuations and random noise*
JOURNAL Nonlinear Studies **20** (2013), 281-305

34. **AUTHORS** C. Bianca, M. Ferrara and L. Guerrini
TITLE *Hopf bifurcations in a delayed-energy-based model of capital accumulation*
JOURNAL Applied Mathematics & Information Sciences **7** (2013), 139-143

33. **AUTHORS** C. Bianca, M. Ferrara and L. Guerrini
TITLE *The Cai model with time delay: Existence of periodic solutions and asymptotic analysis*
JOURNAL Applied Mathematics & Information Sciences **7** (2013), 21-27

32. **AUTHORS** C. Bianca
TITLE *From physics to living systems - Applicable mathematical models*
JOURNAL J Appl Computat Math **1** (2012), doi:10.4172/2168-9679.1000e123

31. **AUTHORS** C. Bianca
TITLE *Thermostatted models - Multiscale analysis and tuning with real-world systems data*
JOURNAL Physics of Life Reviews **9** (2012), 418-425

30. **AUTHORS** C. Bianca
TITLE *Thermostatted kinetic equations as models for complex systems in physics and life sciences*
JOURNAL Physics of Life Reviews **9** (2012), 359-399
NOTE *Science Direct, TOP* 25 *Hottest Articles, Physics of Life Reviews Ranking:* 22/25, *Year* 2012
http://top25.sciencedirect.com/subject/physics-and-astronomy/21/journal/physics-of-life-reviews/15710645/archive/42/

29. **AUTHORS** C. Bianca, F. Chiacchio, F. Pappalardo, M. Pennisi
TITLE *Mathematical modeling of the immune system recognition to mammary carcinoma antigen*
JOURNAL BMC Bioinformatics **13** (2012), S21

28. **AUTHORS** C. Bianca
TITLE *Onset of nonlinearity in thermostatted active particles models for complex systems*
JOURNAL Nonlinear Analysis: Real World Applications **13** (2012), 2593-2608
NOTE *Science Direct, TOP* 25 *Hottest Articles, Nonlinear Analysis: Real World Applications Ranking:* 2/25, *Year* 2012
http://top25.sciencedirect.com/subject/mathematics/16/journal/nonlinear-analysis-real-world-applications/14681218/archive/42/

27. **AUTHORS** C. Bianca
TITLE *Mathematical modeling of crowds dynamics: Complexity and kinetic approach*
JOURNAL Nonlinear Studies **19** (2012), 345-354

26. **AUTHORS** C. Bianca and M. Pennisi
TITLE *The triplex vaccine effects in mammary carcinoma: A nonlinear model in tune with simtriplex*
JOURNAL Nonlinear Analysis: Real World Applications **13** (2012), 1913-1940
NOTE *Science Direct, TOP* 25 *Hottest Articles, Nonlinear Analysis: Real World Applications Ranking:* 1/25, *Year* 2012
http://top25.sciencedirect.com/subject/mathematics/16/journal/nonlinear-analysis-real-world-applications/14681218/archive/42/

25. **AUTHORS** C. Bianca
TITLE *Modeling complex systems by functional subsystems representation and thermostatted-KTAP methods*
JOURNAL Applied Mathematics & Information Sciences **6** (2012), 495-499

24. **AUTHORS** C. Bianca
TITLE *Thermostatted kinetic models for complex systems under microscopic external fields*
JOURNAL Mathematics in Engineering, Science and Aerospace **3** (2012), 225-238

23. **AUTHORS** C. Bianca
TITLE *Complex dynamic systems: Nonlinear methods, mathematical models and thermodynamics*
JOURNAL Mathematics in Engineering, Science and Aerospace **3** (2012), 221-224

22. **AUTHORS** C. Bianca
TITLE *An existence and uniqueness theorem for the Cauchy problem for thermostatted-KTAP models*
JOURNAL Int. Journal of Math. Analysis **6** (2012), 813-824

21. **AUTHORS** C. Bianca
TITLE *Kinetic theory for active particles modelling coupled to Gaussian thermostats*
JOURNAL Applied Mathematical Sciences **6** (2012), 651-660

20. **AUTHORS** C. Bianca
TITLE *On the existence of periodic orbits in nonequilibrium Ehrenfest gas*
JOURNAL Int. Math. Forum **7** (2012), 221-232

19. **AUTHORS** C. Bianca and M. Pennisi
TITLE *Immune system modelling by top-down and bottom-up approaches*
JOURNAL Int. Math. Forum **7** (2012), 109-128

18. **AUTHORS** C. Bianca
TITLE *Mathematical modeling for keloid formation triggered by virus: Malignant effects and immune system competition*
JOURNAL Math. Models Methods Appl. Sci. **21** (2011), 389-419

17. **AUTHORS** C. Bianca and L. Fermo
TITLE *Bifurcation diagrams for the moments of a kinetic type model of keloid-immune system competition*
JOURNAL Comp. & Math. Appl **61** (2011), 277-288

16. **AUTHORS** C. Bianca, M. Pennisi, S. Motta, and M.A. Ragusa
TITLE *Immune System Network and Cancer Vaccine*
JOURNAL AIP Conf. Proc. **1389** (2011), 945-948

15. **AUTHORS** C. Bianca and M. Delitala
TITLE *On the modelling of genetic mutations and immune system competition*
JOURNAL Comp. & Math. Appl **61** (2011), 2362-2375

14. **AUTHORS** N. Bellomo, C. Bianca, and V. Coscia
TITLE *On the modeling of crowd dynamics: An overview and research perspectives*
JOURNAL Bol. Soc. Esp. Mat. Apl. (Sema Journal) **54** (2011), 25-46

13. **AUTHORS** C. Bianca and V. Coscia
TITLE *On the coupling of steady and adaptive velocity grids in vehicular traffic modelling*
JOURNAL Applied Mathematics Letters **24** (2011), 149-155

12. **AUTHORS** C. Bianca
TITLE *Weyl-flow and conformally symplectic structure of thermostatted billiards: The problem of the hyperbolicity*
JOURNAL Nonlinear Analysis: Hybrid Systems **5** (2011), 32-51

11. **AUTHORS** N. Bellomo, C. Bianca, and M.S. Mongiovì
TITLE *On the modeling of nonlinear interactions in large complex systems*
JOURNAL Applied Mathematics Letters **23** (2010), 1372-1377

10. **AUTHORS** C. Bianca
TITLE *Thermostatted planar billiards as simple models of mass transport in microporous media*
JOURNAL Communications in Applied and Industrial Mathematics **1** (2010), 22-40

9. **AUTHORS** A. Bellouquid and C. Bianca
TITLE *Modelling aggregation-fragmentation phenomena from kinetic to macroscopic scales*
JOURNAL Math. Comput. Modelling **52** (2010), 802-813

8. **AUTHORS** C. Bianca
TITLE *On the mathematical transport theory in microporous media: The billiard approach*
JOURNAL Nonlinear Analysis: Hybrid Systems **4** (2010), 699-735

7. **AUTHORS** C. Bianca
TITLE *On the modelling of space dynamics in the kinetic theory for active particles*
JOURNAL Math. Comput. Modelling **51** (2010), 72-83

6. **AUTHORS** N. Bellomo, C. Bianca, and M. Delitala
TITLE *Complexity analysis and mathematical tools towards the modelling of living systems*
JOURNAL Physics of Life Reviews **6** (2009), 144-175

5. **AUTHORS** C. Bianca
TITLE *Modelli di biliardi caotici e poligonali per lo studio del trasporto in mezzi microporosi*
JOURNAL Boll. Unione Mat. Ital. Sez. A Mat. Soc. Cult. **2** (2009), 203-206

4. **AUTHORS** C. Bianca, F. Pappalardo, and S. Motta
TITLE *The MWF method for kinetic equations system*
JOURNAL Comp. & Math. Appl **57** (2009), 831-840

3. **AUTHORS** C. Bianca and L. Rondoni
TITLE *The nonequilibrium Ehrenfest gas: A chaotic model with flat obstacles?*
JOURNAL Chaos **19** (2009), 013121

2. **AUTHORS** C. Bianca and S. Motta
TITLE *The MWF method: a convergence theorem for homogenous one-dimensional case*
JOURNAL Comp. & Math. Appl **58** (2009), 579-588

1. **AUTHORS** O. Jepps, C. Bianca, and L. Rondoni
TITLE *Onset of diffusive behaviour in confined transport systems*
JOURNAL Chaos **18** (2008), 013127
NOTE *It has been selected for the April 7, 2008 issue of "Virtual Journal of Nanoscale Science & Technology"* EDITED BY THE AIP AND APS

SCIENTIFIC BOOKS

4. **AUTHORS** C. Bianca
TITLE *Mathematical and Numerical Analysis of Nonlinear Evolution Equations : Advances and Perspectives*
EDITOR MDIP Books, Basel, Switzerland, Germany, (2020)
ISBN-13 978-3-659-79624-1, ISBN-10 365-9796-24-7
https://www.mdpi.com/books/pdfview/book/2932

3. **AUTHORS** J. Riposo and C. Bianca
TITLE *Mathematical and Computational Methods in Biology and Finance*
EDITOR LAMBERT Academic Publishing, Germany, (2015)
ISBN-13 978-3-659-79624-1, ISBN-10 365-9796-24-7
https://www.lap-publishing.com/catalog/details/store/ru/book/978-3-659-79624-1/mathematical-and-computational-methods-in-biology-and-finance?search=riposo

2. **AUTHORS** C. Bianca
TITLE *Mathematical Billiards and Applications - Chaos, Complexity and Anomalous Transport*
EDITOR LAMBERT Academic Publishing, Germany, (2012)
ISBN-13 978-3-8484-4914-9, ISBN-10 384-8449-14-5
https://www.lap-publishing.com/catalog/details/store/gb/book/978-3-8484-4914-9/mathematical-billiards-and-applications?search=Bianca

1. **AUTHORS** C. Bianca and N. Bellomo
TITLE *Towards a Mathematical Theory of Multiscale Complex Biological Systems*
EDITOR World Scientific, Series in Mathematical Biology and Medicine, (2011)
ISBN-13 978-981-4340-53-3, ISBN-10 981-4340-53-7
http://www.worldscibooks.com/mathematics/8085.html

Teaching Books

10. **Authors** C. Bianca
Title *Algèbre II et Géométrie II - Grandes Écoles*
Editor Clut, Torino (2021)
ISBN 9788879924818
https://www.clut.it/ita/chimica-fisica-matematica-statistica/-/algebre-ii-et-geometrie-ii/444.html

9. **Authors** C. Bianca
Title *Analyse II - Grandes Écoles*
Editor Clut, Torino (2020)
ISBN 9788879924788
https://www.clut.it/ita/chimica-fisica-matematica-statistica/-/analyse-ii-grandes-ecoles/414.html

8. **Authors** C. Bianca
Title *Géométrie I - Grandes Écoles*
Editor Clut, Torino (2020)
ISBN 9788879924603
https://www.clut.it/ita/chimica-fisica-matematica-statistica/-/algbre-grand-ecole-/306.html

7. **Authors** C. Bianca
Title *Algèbre I - Grandes Écoles*
Editor Clut, Torino (2020)
ISBN 9788879924603
https://www.clut.it/ita/chimica-fisica-matematica-statistica/-/algbre-grand-ecole-/306.html

6. **Authors** C. Bianca
Title *Analyse I - Grandes Écoles (Partie II)*
Editor Clut, Torino (2019)
ISBN 9788879924559
http://www.clut.it/ita/chimica-fisica-matematica-statistica/-/analyse-ii-grandes-coles-partie-ii/294.html

5. **Authors** C. Bianca
Title *Analyse I - Grandes Écoles (Partie I)*
Editor Clut, Torino (2019)
ISBN 9788879924467
http://www.clut.it/ita/chimica-fisica-matematica-statistica/-/analyse-ii-grandes-coles-partie-i/294.html

4. **Authors** C. Bianca and L. Mazzi
Title *Pillole di Analisi Matematica II*
Editor Clut, Torino (2014)
ISBN 88-799-2362-0
http://www.clut.it/ita/chimica-fisica-matematica-statistica/-/pillole-di-analisi-matematica-ii/242.html

3. **Authors** C. Bianca
Title *Analisi Matematica II in Test Svolti e Proposti*
Editor Clut, Torino (2012)
ISBN 88-799-2317-0
http://www.clut.it/viewbook.php?id=200

2. **AUTHORS** C. Bianca and F. Perri
TITLE *Chi Ha Paura dell'Analisi...delle Successioni e Serie? (Più di 500 esercizi)*
EDITOR Pitagora Editrice, Bologna (2011)
ISBN 88-371-1857-0
http://www.pitagoragroup.it/pited/Bianca%20Perri%201753.html

1. **AUTHORS** C. Bianca and F. Perri
TITLE *Chi Ha Paura dell'Analisi...Matematica I? (Più di 1.200 esercizi)*
EDITOR Pitagora Editrice, Bologna (2008)
ISBN 88-371-1753-1
http://www.pitagoragroup.it/pited/Bianca%20Perri%201753.html

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DISSERTATION TITLE *Competition between cancer cells and immune system cells:*
The contribution of kinetic theory
CO-ADVISOR Annie Lemarchand, LPTMC, Sorbonne Université, Paris, France

PHD STUDENT Marco Dalla Via (2018-2020)
PhD in Theoretical Physics, 3^{rd} December 2020

AFFILIATION Laboratoire Quartz, ECAM-EPMI, Cergy, France
DISSERTATION TITLE *A modeling theory for the energy sources distribution optimization based on the methods of generalized statistical physics*

PHD STUDENT Marco Menale (2018-2020)
PhD in Mathematical Physics, 26^{th} November 2020
AFFILIATION Laboratoire Quartz, ECAM-EPMI, Cergy, France
Dipartimento di Matematica e Fisica, Università degli Studi della Campania, Italy
DISSERTATION TITLE *An inverse thermostatted kinetic theory approach for the modeling of complex living systems*
CO-ADVISOR Bruno Carbonaro, Università degli Studi della Campania, Italy

PHD STUDENT Louis Brèzin (2016-2017)
AFFILIATION Laboratoire de Physique Statistique,
École Normale Supérieure, Paris, France
CO-ADVISOR Martine Ben Amar, LPS-ENS, Paris, France

PHD STUDENT Julien Riposo (2012-2015)
PhD in Theoretical Physics, 17^{th} September 2015
AFFILIATION Laboratoire de Physique Théorique de la Matière Condensée,
Pierre and Marie Curie University, Paris, France
DISSERTATION TITLE *Computational and mathematical methods for data analysis in biology and finance*
CO-ADVISOR Julien Mozziconacci, UPMC, Paris, France

PHD STUDENT Marzio Pennisi (2008-2010)
PhD in Mathematics for the Technology, 26^{th} February 2010
AFFILIATION Department of Mathematics & Computer Science,
University of Catania, Catania, Italy
DISSERTATION TITLE *Modeling efficacy and protocol optimization of a cancer vaccine*
CO-ADVISOR Professor Santo Motta, University of Catania, Italy

ADVISOR OF POSTDOCS

POSTDOC Marzio Pennisi (2011-2013)
AFFILIATION Department of Mathematics & Computer Science, University of Catania, Italy
RESEARCH TOPICS *Mathematical and computational models for complex biological systems*

POSTDOC Luisa Fermo (2011)
AFFILIATION Department of Mathematics, Politecnico of Turin, Italy
RESEARCH TOPICS *Development and simulation of kinetic models*

PUBLICATIONS IN CONFERENCE PROCEEDINGS

5. AUTHORS A. Lemarchand and C. Bianca
TITLE *"Time asymmetry of cross-correlation functions as a signature of non equilibrium steady states" (Chapter of Book)*
PUBLISHED IN Proceedings of "The International Symposium on Mathematical and Computational Biology, BIOMAT 2014",
(2015), ISBN 978-981-4667-93-7, pp. 26-45

4. AUTHORS C. Bianca, M. Pennisi, and S. Motta
TITLE *"The MWF method for kinetic models: An overview and research perspective"*

PUBLISHED IN Proceedings of "The 11th International Conference on Computational and Mathematical Methods in Science and Engineering, CMMSE 2011", (2011), ISBN 978-84-614-6167-7, pp. 1678-1682

3. **AUTHORS** M. Pennisi, C. Bianca, F. Pappalardo, and S. Motta
TITLE *"Compartmental mathematical modeling of immune system-melanoma competition"*
PUBLISHED IN Proceedings of "The 11th International Conference on Computational and Mathematical Methods in Science and Engineering, CMMSE 2011", (2011), ISBN 978-84-614-6167-7, pp. 930-934

2. **AUTHORS** M. Pennisi, C. Bianca, F. Pappalardo, and S. Motta
TITLE *"Modeling artificial immunity against mammary carcinoma"*
PUBLISHED IN Proceedings of "The 10th International Conference on Computational and Mathematical Methods in Science and Engineering, CMMSE 2010", (2010), ISBN 978- 84-613-5510-5, pp. 753-756

1. **AUTHORS** C. Bianca and L. Rondoni
POSTER TITLE *"Thermostatted planar billiards as simple model of mass transport in microporous membranes"*
PUBLISHED IN Proceedings of "The 10th Experimental Chaos Conference, ECC10" , (2008), ISBN 978-88-7751-282-6

PRESS RELEASE

6TH FEBRUARY 2012 In un Modello Matematico la "Lotta" fra Malattia e Sistema Immunitario
INTERVIEW AT *ANSA.IT*

15TH JUNE 2011 Modello Matematico Simula l'Evoluzione di una Malattia
INTERVIEW AT *ANSA.IT*

22ND JUNE 1999 Una Scuola di Cervelloni
NEWSPAPER *La Sicilia*

NEWSPAPER ARTICLES

AUTHORS C. Bianca
TITLE *Dal Kosovo al Vaccarini*
NEWSPAPER La Sicilia (April 20th, 1999)
http://www.lasicilia.it/

MEMBER OF CONFERENCE ORGANIZING COMMITTEE

MATHMOD 2022 10th Vienna International Conference on Mathematical Modelling
Vienna, Austria, 16-18 February, 2022
http://www.mathmod.at/

WBCMA2021 1-st Western Balkan Conference in Mathematics and Applications
Prishtina, Kosovo, 10-12 June, 2021
http://fwbcma2021.ilirias.com/

ICCSCM 2020 The 9th International Conference on Computer Science & Computational Mathematics
Langkawi, Malaysia, 9-10 July, 2020
https://www.iccscm.com/v1/

ICAEM 2019 International Conference of Applied and Engineering Mathematics
London, U.K., 3-5 July, 2019
http://www.iaeng.org/WCE2019/ICAEM2019.html

ICCSCM 2019 The 8th International Conference on Computer Science & Computational Mathematics
Langkawi, Malaysia, 4-5 July, 2019
https://www.iccscm.com/cms/

MATHMOD 2018 9th Vienna International Conference on Mathematical Modelling
Vienna, Austria, 21-23 February, 2018
http://www.mathmod.at/

ICCC 2018 4th IEEE International Conference on Computer and Communications
Chengdu, China, 7-10 December, 2018
http://www.iccc.org/index.html

ICAEM 2017 International Conference of Applied and Engineering Mathematics
London, U.K., 5-7 July, 2017
http://www.iaeng.org/WCE2017/ICAEM2017.html

ICCC 2017 3rd IEEE International Conference on Computer and Communications
Chengdu, China, 13-16 December, 2017
http://www.iccc.org/

ICNPAA 2016 11th International Conference on Mathematical Problems in Engineering, Aerospace and Sciences
La Rochelle, France, 5-8 July, 2016
http://www.internationalmathematics.com/icnpaa/

MATHMOD 2015 8th Vienna International Conference on Mathematical Modelling
Vienna, Austria, 18-20 February, 2015
http://www.mathmod.at/

ICNPAA 2014 10th International Conference on Mathematical Problems in Engineering, Aerospace and Sciences
Narvik, Norway, 15-18 July, 2014
http://icnpaa.com/index.php/icnpaa/2014

BIOSTATISTICS 2014 3rd International Conference and Exhibition on Biometrics & Biostatistics
New Orleans, USA, 23-25 June, 2014
http://www.omicsgroup.com/biometrics-biostatistics-conference-2014/

ICAEM 2013 International Conference of Applied and Engineering Mathematics
London, U.K., 3-5 July, 2013
http://www.iaeng.org/WCE2013/ICAEM2013.html

EDITOR OF SPECIAL ISSUES

TITLE *Modeling approaches for complex adaptive systems*
JOURNAL Mathematical Biosciences and Engineering (2024), in progress
https://www.aimspress.com/mbe/article/6493/special-articles

TITLE *Mathematical structures and models for complex systems*
JOURNAL AIMS Mathematics (2024), in progress
http://www.aimspress.com/math/article/6591/special-articles

TITLE *Differential equation frameworks and models for the physics of biological systems*
JOURNAL AIMS Biophysics (2023), in progress
http://www.aimspress.com/aimsbpoa/article/6541/special-articles

Interplay and multiscale modeling of biological complex systems
JOURNAL AIMS Biophysics (2023)
http://www.aimspress.com/aimsbpoa/article/6057/special-articles

TITLE *Top-down and bottom-up approaches for the modeling of complex systems*
JOURNAL Mathematical Biosciences and Engineering (2022)
https://www.aimspress.com/mbe/article/5793/special-articles

TITLE *Mathematical and computational modeling of biological systems: Advances and perspectives*
JOURNAL AIMS Biophysics (2021)
http://www.aimspress.com/aimsbpoa/article/5987/special-articles

Symmetry in nonequilibrium statistical mechanics and dynamical systems
JOURNAL Symmetry (2020)
https://www.mdpi.com/journal/symmetry

TITLE *Theoretical frameworks and models for biological systems*
JOURNAL AIMS Biophysics (2020)
http://www.aimspress.com/newsinfo/1366.html

TITLE *Mathematical and numerical analysis of nonlinear evolution equations: Advances and perspectives*
JOURNAL Mathematics (2019)
https://www.mdpi.com/journal/mathematics

TITLE *Time delayed equations as models in nature and society*
JOURNAL Discrete Dynamics in Nature and Society **2015** (2015)
http://www.hindawi.com/journals/ddns/osi/

TITLE *Fractional calculus and applications*
JOURNAL Journal of King Saud University: Engineering Science **2015**
http://www.journals.elsevier.com/journal-of-king-saud-university-engineering-sciences/

TITLE *Nonlinear evolution equations modeling complex phenomena: Recent and future trends*
JOURNAL The Scientific World Journal **2014** (2014), 629624
http://www.hindawi.com/journals/tswj/si/629624/cfp/

TITLE *Nonlinear dynamics in applied sciences systems: Advances and perspectives*
JOURNAL Abstract and Applied Analysis **2013** (2013), 259718
http://www.hindawi.com/journals/aaa/si/259718/

TITLE *Complex dynamic systems: Nonlinear methods, mathematical models and thermodynamics*
JOURNAL Mathematics in Engineering, Science and Aerospace **3** (2012), 221-339
http://nonlinearstudies.com/index.php/mesa/issue/view/98

Editor in Chief

Journals

AIMS Biophysics
Stochastics Modelling and Applications
Journal of Mathematics and Statistics (Until 2020)
Journal of Applied & Computational Mathematics (Until 2017)

Editorial Board Member

Journals

Alexandria Engineering Journal
Advances in Mathematical Physics
Mathematics
Nonlinear Studies
Applied Mathematics & Information Sciences
Mathematical Problems in Engineering
Mathematics in Engineering, Science and Aerospace
Global and Stochastic Analysis
Contributions to Mathematics
Electronic Journal of Mathematics
British Journal of Mathematics & Computer Science
International Journal of Mathematical Analysis
Journal of Applied Mathematics & Bioinformatics
Bulletin of Mathematical Analysis and Applications
Journal of Mathematical Analysis
International Journal of Numerical Methods and Applications
Journal of Analysis & Number Theory
Global Journal of Mathematical Analysis
Research and Communications in Mathematics and Mathematical Sciences
Electronic Journal of Mathematical Analysis and Applications
Theoretical Mathematics & Applications
Journal of Fractional Calculus and Applications
Asian Journal of Mathematics and Computer Research
UPI Journal of Mathematics and Biostatistics
Enliven: Biostatistics and Metrics.
Computer Simulation in Application
Waves Wavalets and Fractals-Advanced Analysis (Until 2018)

Editor of Book Series

Book Series

Mathematics and Applied Mathematics, Cambridge Scholars Publishing

Referee Activity

Journals

Journal of Mathematical Biology
Acta Biotheoretica
Nonlinear Analysis: Hybrid Systems
Mathematical and Computer Modelling of Dynamical Systems
Mathematical Methods in the Applied Sciences
Computational and Mathematical Methods in Medicine
Computers & Mathematics with Applications
Applied Mathematics and Computation
Mathematical and Computer Modelling
International Journal of Bifurcation and Chaos

Abstract and Applied Analysis
Chaos, Solitons & Fractals
Royal Society Open Science
Boundary Value Problems
Journal of Applied Mathematics and Computing
Bulletin of the Malaysian Mathematical Sciences Society
Advances in Difference Equations
European Journal of Physics
Physics Letters A
Physica Scripta
Nonlinearity
Plos One
Measurement
BMC Medical Informatics and Decision Making
Journal of Informatics and Mathematical Sciences
SpringerPlus
Algorithms
System Science & Control Engineering
International Journal of Dynamical Systems and Differential Equations
Analele Stiintifice ale Universitatii Ovidius Constanta
Journal of Mathematics and System Science
Journal of Computer Technology & Applications
Nonlinear Engineering Modeling and Application
Punjab University Journal of Mathematics
Population and Environment
IEEE/ACM Transactions on Computational Biology and Bioinformatics
IEEE Transactions on Intelligent Transportation Systems
Swarm and Evolutionary Computation

Invited Author of Reviews

Journal Mathematical Reviews
Database MathSciNet (American Mathematical Society)

Journal Earth Systems and Environmental Science
Database Earth Systems and Environmental Science (Elsevier)

Involvement in Research Projects

Oct 2016 - Jun 2018 DGA Projet
"Conception d'un réseau de surveillance de la pollution de l'air d'un site sensible"
Funded by Ministère de la Défense, France
Position Principal Investigator

Jan 2014 - Avr 2015 ANR T-KiNeT Projet
"Modulation Thermique el Lecture Fluorescence/Raman pour l'Analyse Cinétique de Réseaux de Réactions Chimiques/Biologiques"
Funded by Agence Nationale de la Recherche
Position Participant

2009 - 2013 FIRB-Project, RBID08PP3J
TITLE *Metodi Matematici e Relativi Strumenti per la Modellizzazione e la Simulazione della Formazione di Tumori, Competizione con il Sistema Immunitario e Conseguenti Suggerimenti Terapeutici*
FUNDED BY MIUR (MINISTERO DELL'ISTRUZIONE, DELL'UNIVERSITÀ E DELLA RICERCA)
POSITION PARTICIPANT

JUN 2011 - JUN 2012 Young Researchers-Project, Prot. n. 43
TITLE *Mathematical Modelling for the Cancer-Immune System Competition Elicited by a Vaccine*
FUNDED BY INDAM-GNFM (ISTITUTO NAZIONALE DI ALTA MATEMATICA) (GRUPPO NAZIONALE DELLA FISICA MATEMATICA)
POSITION COORDINATOR

2009 - 2010 Compagnia di San Paolo-Project, Prot. n. 943
TITLE *Modelli Matematici nella Ricerca sui Tumori*
FUNDED BY Compagnia di San Paolo, Turin
POSITION PARTICIPANT

2009 European-Project, FP7-HEALTH-F4-2008-202047
TITLE *Resolve Chronic Inflammation and Achieve Healthy Ageing by Understanding Non-regenerative Repair (RESOLVE)*
FUNDED BY European Research Council
POSITION PARTICIPANT

2008 European-Project, FP6-IST-4-2004-028069
TITLE *The European Virtual Human Immune System Project (IMMUNOGRID)*
FUNDED BY European Research Council
POSITION PARTICIPANT

2005-2007 Lagrange-Project
TITLE *Transport Phenomena in Microporous Membranes and Large Deviations in Nonequilibrium Statistical Mechanics*
FUNDED BY CRT Foundation
POSITION PARTICIPANT

EDITORIAL COMMUNICATIONS

3. **AUTHORS** C. Bianca, L. Domenico
TITLE *2023-end editorial: achievements, thanks, perspectives*
JOURNAL AIMS Biophysics **11** (2024), 31-38

2. **AUTHORS** C. Bianca, L. Domenico
TITLE *2022-end editorial: achievements, thanks, perspectives*
JOURNAL AIMS Biophysics **10** (2023), 90-94

1. **AUTHORS** C. Bianca
TITLE *2021-end editorial: achievements, thanks, perspectives*
JOURNAL AIMS Biophysics **9** (2022), 1-4

In Preparation/Submitted Articles

1. **Authors** C. Bianca, N. Santie
Title *Thermostatted kinetic theory in measure spaces*

2. **Authors** C. Bianca, M. Menale
Title *On the well-posedness problem in thermostatted models with time-dependent parameters*

3. **Authors** C. Bianca, M. Menale
Title *Generalized results in the thermostatted kinetic theory approach*

4. **Authors** C. Dogbe
Title *Regularization and propagation in PDE for infinite-dimensional Hilbert spaces*