

CARLO
BIANCA



**Research Advisor,
MIUR-FIRB Project RBID08PP3J,**
Dipartimento di Scienze Matematiche,
Politecnico di Torino,
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WebPage: <http://calvino.polito.it/~cbianca/>

PERSONAL DATA

FIRST NAME	Carlo
LAST NAME	Bianca
DATE OF BIRTH	September 22, 1980
PLACE OF BIRTH	Catania, Italy
NATIONALITY	Italian

EMPLOYMENT

JAN 10 - PRESENT	Research Advisor, 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

12TH - 16TH JUNE 09 Intensive Course: *“Mathematical Tools Towards the Modelling of Complex Living Systems”*, Prof. Bellomo Nicola,
Professor of Mathematical Physics, Politecnico of Turin, Italy,
HomePage: <http://staff.polito.it/nicola.bellomo/>
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

13TH MAR 08 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
email: lamberto.rondoni@polito.it

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 *“Equazione di Boltzmann: Teoria e Metodi Monte Carlo”*
ENGLISH TITLE *“The Boltzmann equation: Theory and Monte Carlo Methods”*
SUPERVISOR Prof. Giovanni Russo,
Professor of Numerical Analysis, University of Catania, Italy,
email: russo@dmf.unict.it

16TH JULY 1999
SCHOOL-LEAVING
EXAMINATION MARK
HIGH SCHOOL

Geometric Technical Diploma

100 (out of 100)

Istituto Tecnico per Geometri "G.B. Vaccarini", Catania,
Italy

LANGUAGES

ITALIAN

Mother tongue

ENGLISH

First certificate of proficiency:

"International English Language Testing System (IELTS)"

COMPUTER SKILLS

SYSTEMS

Windows, Unix

SKILLS

Parallel Computing, Fortran, Matlab, Mathematica, C++, Latex

TEACHING ACTIVITY

MAR 12 - PRESENT

Teaching assistant in "Calculus",

Pianificazione Territoriale, Urbanistica e Paesaggistico
Ambientale students (Prof. Roberto Monaco),

AFFILIATION

Politecnico of Turin, Italy

OCT 11 - JAN 12

Teaching assistant in "Analisi Matematica I",

Engineering students (Prof. Luisa Mazzi),

AFFILIATION

Politecnico of Turin, Italy

MAR 11 - JUN 11

Locum Teacher of "Calculus",

Pianificazione Territoriale, Urbanistica e Paesaggistico
Ambientale students (Prof. Claudio Tebaldi),

AFFILIATION

Politecnico of Turin, Italy

FEB 11

AFFILIATION

Teacher in "Matematica",

High School "Convitto Nazionale Umberto I", Turin, Italy

SEP 09 - JAN 10

Teaching assistant in "Laboratorio di Fisica Matematica",

Electronic Engineering students (Prof. Nicola Bellomo),

AFFILIATION

Politecnico of Turin, Italy

SEP 09 - DEC 09

Teaching assistant in "Equazioni della Fisica Matematica",

Mathematical Modelling in Engineering students

(Prof. Nicola Bellomo),

AFFILIATION

Politecnico of Turin, Italy

SEP 09 - DEC 09

Teaching assistant in "Analisi Matematica I",

Technology and International Business students

(Prof. Luisa Mazzi),

AFFILIATION

Politecnico of Turin, Italy

MAR 09 - JUNE 09	Teaching assistant in "Geometria", Environmental Engineering students (Prof. Giulio Tedeschi), Politecnico of Turin, Italy
AFFILIATION	
25TH JAN 08 - 16TH FEB 08	Teacher in "Matematica" High School "Bodoni-Paravia", Turin, Italy
AFFILIATION	
SEP 07 - DEC 07	Teaching assistant in "Analisi Matematica 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), Politecnico of Turin, Italy
AFFILIATION	
SEP 06 - DEC 06	Teaching assistant in "Analisi Matematica 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), Politecnico of Turin, Italy
AFFILIATION	
NOV 05 - JAN 06	Teaching assistant in "Analisi Matematica II", Computer Science Engineering students (Prof. Paolo Tilli), Electronic Engineering students (Prof. Paolo Tilli), Physical Engineering students (Prof. Paolo Tilli), Telecommunication Engineering students (Prof. Paolo Tilli), Politecnico of Turin, Italy
AFFILIATION	

PRESENT RESEARCH INTERESTS

- 1 Mathematical Modelling of Living Systems:**
Vehicular Traffic, Crowds Dynamics, and Biological Systems
- 2 Nonequilibrium Statistical Mechanics and Dynamical Systems:**
Billiard Theory, Chaos, and Transport in Microporous Media
- 3 Numerical Methods for Kinetic Equations**

AWARDS

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

INTERNATIONAL INTERACTIONS

2006	Professor M.P. Wojtkowski
AFFILIATION	Uniwersytet Warmińsko-Mazurski w Olsztynie, Olsztyn (Poland)
PROJECT	Weyl-Flow and Hyperbolic Thermostatted Billiards
2012	Professor L. Desvillettes
AFFILIATION	CNRS, Cachan Cedex (France)
PROJECT	Analysis of Kinetic Models for Complex Systems

SCIENTIFIC COMMUNICATIONS AND CONFERENCES

30TH NOV - 2ND DEC 11	Speaker at the CIMAB & GASVA SIMAI Workshop: <i>"Young Researcher Workshop on Theoretical Approaches and Related Mathematical Methods in Biology and Medicine"</i> , L'Aquila, Italy
TITLE	"Kinetic Modelling for Keloid Genesis: The Parameters Role on the Moments Evolution"
19TH - 25TH SEP 11	Communication at the Conference: <i>"The 9th International Conference of Numerical Analysis and Applied Mathematics, ICNAAM 2011"</i> , Halkidiki, Greece
TITLE	"Immune System Network and Cancer Vaccine"
26TH - 30TH JUN 11	Communication at the Conference: <i>"The 11th International Conference on Computational and Mathematical Methods in Science and Engineering, CMMSE 2011"</i> , Alicante, Spain
TITLE	"The MWF Method for Kinetic Models: An Overview and Research Perspective"
26TH - 30TH JUN 11	Communication at the Conference: <i>"The 11th International Conference on Computational and Mathematical Methods in Science and Engineering, CMMSE 2011"</i> , Alicante, Spain
TITLE	"Compartmental Mathematical Modeling of Immune System Melanoma Competition"
8TH APR 11	Invited Speaker at the SIMAI Workshop: <i>"Prospettive di Sviluppo della Matematica Applicata in Italia 2011, In memoria di Vinicio Boffi"</i> , Rome, Italy
TITLE	"Mathematical Modelling in Medicine and Biology: Chaos, Complexity, and Transport"
28TH SEPT 10	Speaker at the Conference: <i>"Fifth China-Italy Colloquium on Applied Mathematics"</i> , 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, Andalucia, 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 Meeting 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 Meeting 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
- 1324TH JUNE 03** **Speaker** at the College of Engineering,
University of Catania, Italy
- TITLE** "The Heat Equation: Fundamental Solution and Properties"

AFFILIATIONS

- JAN 10 - PRESENT** Member of "Societa' Italiana di Matematica Applicata e Industriale", (SIMAI)
- WEBSITE** <http://www.simai.eu/>
- JAN 10 - PRESENT** Member of "European Mathematical Society", (EMS)
- WEBSITE** <http://www.emis.de/>

- JAN 10 - PRESENT** 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 - PRESENT** Member of “Gruppo Nazionale della Fisica Matematica”, (GNFM)
WEBSITE <http://gruppi.altamatematica.it/gnfm/>
- JAN 06 - DEC 08** Member of “Consorzio Nazionale Interuniversitario per le Scienze Fisiche della Materia”, (CNISM)
WEBSITE <http://www.cnism.it/>

FELLOW MEMBER OF RESEARCH GROUPS

- DENOMINATION** *Workgroup on Complex Dynamical Systems: Complexity and Mathematics*
- LEAD** Professor Nicola Bellomo
- AFFILIATION** Department of Mathematics, Politecnico of Turin, Italy
- WEBSITE** <http://calvino.polito.it/fismat/poli>
- DENOMINATION** *Computational Immunology and Immunomics*
- LEAD** Professor Santo Motta
- AFFILIATION** Department of Mathematics & Computer Science, University of Catania, Italy
- WEBSITE** <http://www.immunomics.eu/>
- DENOMINATION** *Nonequilibrium Statistical Mechanics and Dynamical Systems*
- LEAD** Professor Lamberto Rondoni
- AFFILIATION** Department of Mathematics, Politecnico of Turin, Italy
- WEBSITE** <http://calvino.polito.it/rondoni/>

SCIENTIFIC PUBLICATIONS

- 24. AUTHORS** C. Bianca
- TITLE** *Onset of nonlinearity in thermostatted active particles models for complex systems*
- JOURNAL** Nonlinear Analysis: Real World Applications, (doi:10.1016/j.nonrwa.2012.03.005)
- 23. 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

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. Mongiovi
 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 American Institute of Physics and the American Physical Society*

SCIENTIFIC BOOKS

2. **AUTHORS** C. Bianca
 TITLE *Mathematical Billiards and Applications*
 EDITOR LAP 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

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>

PUBLICATIONS IN CONFERENCE PROCEEDINGS

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
 AVAILABLE AT http://www.ansa.it/scienza/notizie/rubriche/fisica/2012/02/06/visualizza_new.html_74826740.html

- 15TH JUNE 2011 Modello Matematico Simula l'Evoluzione di una Malattia
 INTERVIEW AT ANSA.IT
 AVAILABLE AT http://www.ansa.it/scienza/notizie/rubriche/fisica/2011/06/15/visualizza_new.html_817469422.html

- 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/>

SUBMITTED ARTICLES

1. **AUTHORS** C. Bianca, M. Pennisi, and F. Pappalardo
 TITLE *A mathematical model for cancer artificial immunity*

2. **AUTHORS** C. Bianca, M. Pennisi, and F. Pappalardo
 TITLE *Mathematical modeling of the immune system recognition to mammary carcinoma antigen*
3. **AUTHORS** C. Bianca
 TITLE *Mathematical modeling of crowds dynamics: Complexity and kinetic approach*

REFeree ACTIVITY

JOURNALS Mathematical and Computer Modelling of Dynamical Systems
 Mathematical and Computer Modelling of Dynamical Systems
 Analele Stiintifice ale Universitatii Ovidius Constanta
 Journal of Computer Technology and Application
 Journal of Mathematics and System Science
 Computers & Mathematics with Applications
 Applied Mathematics and Computation
 Mathematical & Computer Modelling
 Physics Letters A
 Nonlinearity

REVIEWER ACTIVITY

IN Mathematical Reviews

EDITORIAL BOARD MEMBER

JOURNALS Journal of Applied Mathematics & Bioinformatics
 International Journal of Numerical Methods and Applications
 Far East Journal of Dynamical Systems
 Surveys in Mathematics and Mathematical Sciences
 Research and Communications in Mathematics and Mathematical Sciences
 International Journal of Mathematical Engineering and Science
 International Journal of Mathematics and Scientific Computing

INVOLVEMENT IN RESEARCH PROJECTS

2009 - PRESENT 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 Suggestimenti Terapeutici*

FUNDED BY MIUR
 (MINISTERO DELL'ISTRUZIONE, DELL'UNIVERSITÀ E DELLA RICERCA)

POSITION PARTICIPANT

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