

PERSONAL INFORMATION



Bruno Rubino

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Nationality Italian

POSITION

Professor of Mathematical Analysis and Vice Rector for International Affairs - University of L'Aquila, Italy

WORK EXPERIENCE

- 28/02/1994–29/11/1994 **University research assistant**
University of Bari, Bari (Italy)
- 30/11/1994–31/10/1998 **University research assistant**
University of L'Aquila, L'Aquila (Italy)
- 01/11/1998–31/08/2001 **Associate Professor of Mathematical Analysis**
University of L'Aquila, L'Aquila (Italy)
- 01/09/2001–Present **Full Professor of Mathematical Analysis**
University of L'Aquila, L'Aquila (Italy)
- 01/01/2004–15/05/2012 **Head of the Division of Mathematics for Engineering**
Department of Pure and Applied Mathematics - University of L'Aquila, L'Aquila (Italy)
- 01/11/2004–31/10/2012 **Coordinator of the MSc Programme in Mathematical Engineering**
University of L'Aquila, L'Aquila (Italy)
- 01/11/2005–31/10/2015 **Coordinator of the PhD Programme in Mathematical Modelling for Engineering**
University of L'Aquila, L'Aquila (Italy)
- 01/10/2013–11/04/2018 **Head of the Department of Information Engineering, Computer Science and Mathematics**
University of L'Aquila, L'Aquila (Italy)
- 15/10/2019–Present **Vice Rector for International Affairs**
University of L'Aquila, L'Aquila (Italy)
- 01/09/2008–06/09/2019 **Coordinator of the Erasmus Mundus Joint Master in Mathematical Modelling in Engineering: Theory, Numerics, Applications (MathMods)**
MathMods Consortium (University of L'Aquila, Italy - coordinating institution; University of Hamburg, Germany; University of Nice - Sophia Antipolis, France; Autonomous University

of Barcelona, Catalonia, Spain; Gdansk University of Technology, Gdansk, Poland)

Since its establishment the MathMods consortium (web-site: www.mathmods.eu) was funded through the Erasmus Mundus Programme: in 2008 funding was granted for five cohorts under the Framework Partnership Agreement - FPA 2008-0100 and then again in 2013 (Framework Partnership Agreement - FPA 2013-0227) for five additional cohorts.

- 10/09/2018–Present **Coordinator of the European Joint Master in Mathematical Modelling in Engineering: Theory, Numerics, Applications (MathMods)**
MathMods Consortium (University of L'Aquila, Italy - coordinating institution; University of Hamburg, Germany; Vienna University of Technology, Austria; University of Côte d'Azur, France)
- 08/09/2014–Present **Coordinator of the International Joint Master's Programme in Applied and Interdisciplinary Mathematics (InterMaths)**
InterMaths Consortium (University of L'Aquila, Italy - coordinating institution; Brno University of Technology, Czech Republic; University of Silesia in Katowice, Poland; Ivan Franko National University of Lviv, Ukraine; Gdansk University of Technology, Poland; V.N. Karazin Kharkiv National University, Ukraine - since 2017; Taras Shevchenko National University of Kyiv, Ukraine - since 2018; Karlstad University, Sweden - since 2019)
- 06/07/2008–19/07/2008 **Coordinator of the Erasmus Intensive Programme Mathematical Models in Life and Social Sciences**
University of L'Aquila, L'Aquila (Italy)
- 07/09/2009–19/09/2009 **Coordinator of the Erasmus Intensive Programme Mathematical Models in Life and Social Sciences**
University of L'Aquila, L'Aquila (Italy)
- 12/04/2010–30/04/2010 **Coordinator of the Erasmus Intensive Programme Mathematical Models in Life and Social Sciences**
University of L'Aquila, L'Aquila (Italy)
- 04/07/2011–15/07/2011 **Coordinator of the Erasmus Intensive Programme Mathematical Models in Seismology**
University of L'Aquila, L'Aquila (Italy)
- 27/08/2012–07/09/2012 **Coordinator of the Erasmus Intensive Programme Mathematical Models in Seismology**
University of L'Aquila, L'Aquila (Italy)
- 08/07/2013–19/07/2013 **Coordinator of the Erasmus Intensive Programme Mathematical Models in Seismology**
University of L'Aquila, L'Aquila (Italy)
- 23/06/2014–04/07/2014 **Coordinator of the Erasmus Intensive Programme Mathematical models for social innovation**
University of L'Aquila, L'Aquila (Italy)
- 23/06/2014–04/07/2014 **Coordinator of the Erasmus Intensive Programme Modelling Earthquakes**

University of L'Aquila, L'Aquila (Italy)

EDUCATION AND TRAINING

05/11/1986–15/11/1990	MSc in Mathematics University of Pisa, Pisa (Italy)	EQF level 7
16/11/1990–30/09/1991	Research Training Programme Istituto Nazionale di Alta Matematica, Rome (Italy)	
01/10/1991–31/12/1991	PhD in Mathematics Paris-Sud University, Orsay, Paris (France) Scholarship provided by Istituto Nazionale di Alta Matematica, Rome, Italy	
01/01/1992–27/02/1994	PhD in Mathematics Scuola Normale, Pisa (Italy)	

PERSONAL SKILLS

Mother tongue(s) Italian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C1	B1	B2	B2
French	A2	A2	A1	A1	A1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Driving licence B

ADDITIONAL INFORMATION

Honours and awards *Benedetto Sciarra Prize* for the best Master's Thesis of the Scuola Normale - Pisa, Italy, 1991

Publications

- Di Michele, Federica, Mei, Ming, Rubino, Bruno, Sampalmieri, Rosella (2019). Stationary solutions for a new hybrid quantum model for semiconductors with discontinuous pressure functional and relaxation time. *MATHEMATICS AND MECHANICS OF SOLIDS*, ISSN: 1081-2865, doi: 10.1177/1081286518814289
- DI MICHELE, FEDERICA, MARCATI, PIERANGELO, RUBINO, BRUNO (2017). Stationary solution for transient quantum hydrodynamics with bohemian-type boundary conditions. *COMPUTATIONAL AND APPLIED MATHEMATICS*, vol. 36, p. 459-479, ISSN: 0101-8205, doi: 10.1007/s40314-015-0235-2
- DI MICHELE, FEDERICA, MEI, MING, RUBINO, BRUNO, SAMPALMIERI, ROSELLA COLOMBA (2017). Thermal equilibrium solution to new model of bipolar hybrid quantum hydrodynamics. *JOURNAL OF DIFFERENTIAL EQUATIONS*, vol. 263, p. 1843-1873, ISSN: 0022-0396, doi: 10.1016/j.jde.2017.03.032
- DI MICHELE, FEDERICA, RUBINO, BRUNO, SAMPALMIERI, ROSELLA COLOMBA (2016). A steady-state mathematical model for an EOS capacitor: The effect of the size exclusion. *NETWORKS AND HETEROGENEOUS MEDIA*, vol. 11, p. 603-625, ISSN: 1556-1801, doi: 10.3934/nhm.2016011
- George Noel Djoufiedie, Elisabetta Felaco, RUBINO, BRUNO, SAMPALMIERI, ROSELLA

- COLOMBA (2016). Convergence of Lax–Friedrichs and Godunov schemes for a nonstrictly hyperbolic system of conservation laws arising in oil recovery. *CONTINUUM MECHANICS AND THERMODYNAMICS*, ISSN: 0935-1175, doi: 10.1007/s00161-015-0432-7
- DI MICHELE, FEDERICA, MEI, MING, RUBINO, BRUNO, SAMPALMIERI, ROSELLA COLOMBA (2016). Stationary solutions to hybrid quantum hydrodynamical model of semiconductors in bounded domain. *INTERNATIONAL JOURNAL OF NUMERICAL ANALYSIS AND MODELING*, vol. 13, p. 898-925, ISSN: 1705-5105
 - Donatelli D, Mei M, Sampalmieri R, Rubino B (2013). Asymptotic behavior of solutions to Euler–Poisson equations for bipolar hydrodynamic model of semiconductors. *JOURNAL OF DIFFERENTIAL EQUATIONS*, vol. 255, p. 3150-3184, ISSN: 0022-0396, doi: <http://dx.doi.org/10.1016/j.jde.2013.07.027>
 - Felaco E, Rubino B, Sampalmieri R (2013). Global existence to the Cauchy problem for hyperbolic conservation laws with an isolated umbilic point. *QUARTERLY OF APPLIED MATHEMATICS*, vol. LXXI, p. 629-659, ISSN: 0033-569X, doi: <http://dx.doi.org/10.1090/S0033-569X-2013-01328-6>
 - Di Michele F, MARCATI, PIERANGELO, RUBINO, BRUNO (2013). Steady states and interface transmission conditions for heterogeneous quantum-classical 1-D hydrodynamic model of semiconductor devices. *PHYSICA D-NONLINEAR PHENOMENA*, vol. 243, p. 1-13, ISSN: 0167-2789, doi: 10.1016/j.physd.2012.08.012
 - Ha S-Y, Kang M-J, Lattanzio C, Rubino B (2012). A CLASS OF INTERACTING PARTICLE SYSTEMS ON THE INFINITE CYLINDER WITH FLOCKING PHENOMENA. *MATHEMATICAL MODELS AND METHODS IN APPLIED SCIENCES*, vol. 22, ISSN: 0218-2025, doi: <http://dx.doi.org/10.1142/S021820251250008X>
 - CHIARELLI S, DI MICHELE F, RUBINO B (2012). A HYBRID DRIFT DIFFUSION MODEL: DERIVATION, WEAK STEADY STATE SOLUTIONS AND SIMULATIONS. *MATHEMATICS FOR APPLICATIONS*, vol. 1, p. 37-55, ISSN: 1805-3610
 - Ha S-Y, Kang M-J, Lattanzio C, Rubino B (2012). A class of interacting particle systems on the infinite cylinder with flocking phenomena. *MATHEMATICAL MODELS AND METHODS IN APPLIED SCIENCES*, vol. 22, ISSN: 0218-2025, doi: 10.1142/S021820251250008X
 - Mei M, Sampalmieri R, Rubino B (2012). ASYMPTOTIC BEHAVIOR OF SOLUTIONS TO THE BIPOLEAR HYDRODYNAMIC MODEL OF SEMICONDUCTORS IN BOUNDED DOMAIN. *KINETIC AND RELATED MODELS*, vol. 5, p. 537-550, ISSN: 1937-5093, doi: <http://dx.doi.org/10.3934/krm.2012.5.537>
 - Mei M, SAMPALMIERI, ROSELLA COLOMBA, RUBINO, BRUNO (2012). Asymptotic behavior of solutions to the bipolar hydrodynamic model of semiconductors in bounded domain. *KINETIC AND RELATED MODELS*, vol. 5, p. 537-550, ISSN: 1937-5093, doi: 10.3934/krm.2012.5.537
 - HA S.-Y, LATTANZIO C., RUBINO B, SLEMROD M (2011). Flocking and synchronization of particle models. *QUARTERLY OF APPLIED MATHEMATICS*, vol. 69, p. 91-103, ISSN: 0033-569X
 - Ha S. Y, LATTANZIO, CORRADO, RUBINO, BRUNO, Slemrod M. (2011). Flocking and synchronization of particle models. *QUARTERLY OF APPLIED MATHEMATICS*, vol. 69, p. 91-103, ISSN: 0033-569X
 - KIROVA R, GEORGIEV V, RUBINO, BRUNO, SAMPALMIERI, ROSELLA COLOMBA, YORDANOV B. (2008). Asymptotic behaviour for linear and nonlinear elastic waves in materials with memory. *JOURNAL OF NON-CRYSTALLINE SOLIDS*, vol. 354, p. 4126-4137, ISSN: 0022-3093, doi: DOI 10.1016/j.jnoncrysol.2008.06.020
 - GEORGIEV V., RUBINO, BRUNO, SAMPALMIERI, ROSELLA COLOMBA (2005). Global Existence for elastic waves with memory. *ARCHIVE FOR RATIONAL MECHANICS AND ANALYSIS*, vol. 176, p. 303-330, ISSN: 0003-9527, doi: 10.1007/s00205-004-0345-2
 - MARCATI, PIERANGELO, MEI M, RUBINO, BRUNO (2005). Optimal convergence rates to diffusion waves for solutions of the hyperbolic conservation laws with damping. *JOURNAL OF MATHEMATICAL FLUID MECHANICS*, vol. 7, p. S224-S240, ISSN: 1422-6928, doi: DOI 10.1007/s00021-005-0155-9
 - LATTANZIO C., RUBINO B (2004). Asymptotic behavior and strong convergence for hyperbolic systems of conservation laws with damping. *QUARTERLY OF APPLIED MATHEMATICS*, vol. 62, p. 529-540, ISSN: 0033-569X
 - MARCATI, PIERANGELO, RUBINO, BRUNO (2000). Hyperbolic to parabolic relaxation theory for quasilinear first order systems. *JOURNAL OF DIFFERENTIAL EQUATIONS*, vol. 162, p. 359-399, ISSN: 0022-0396, doi: 10.1006/jdeq.1999.3676

- Mei M, RUBINO, BRUNO (1999). Convergence to traveling waves with decay rates for solutions of the initial boundary problem to a relaxation model. JOURNAL OF DIFFERENTIAL EQUATIONS, vol. 159, p. 138-185, ISSN: 0022-0396, doi: <http://dx.doi.org/10.1006/jdeq.1999.3640>
- MARCATI P., RUBINO B (1997). Entropy methods for nonstrictly hyperbolic systems. JOURNAL OF PARTIAL DIFFERENTIAL EQUATIONS, vol. 10, p. 333-346, ISSN: 1000-940X
- Marcati P, Rubino B (1997). Entropy methods for nonstrictly hyperbolic systems. (English summary) 10 (1997), no. 4, 333–346.. JOURNAL OF PARTIAL DIFFERENTIAL EQUATIONS, vol. 10, p. 333-346, ISSN: 1000-940X
- RUBINO B (1997). Weak Solutions to a Quasilinear Wave Equation of Klein-Gordon or Sine-Gordon Type and Relaxation to the Reaction-Diffusion Equation. NODEA-NONLINEAR DIFFERENTIAL EQUATIONS AND APPLICATIONS, vol. 4, p. 439-457, ISSN: 1021-9722
- Rubino B (1996). Convergence of the fractional step method for a 2×2 nonstrictly hyperbolic system of conservation laws. JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, vol. 197, p. 286-317, ISSN: 0022-247X, doi: <http://dx.doi.org/10.1006/jmaa.1996.0021>
- Marcati P, Rubino B (1996). History-dependent scalar conservation laws. RENDICONTI DEL SEMINARIO MATEMATICO DELL'UNIVERSITA' DI PADOVA, vol. 96, p. 195-204, ISSN: 0041-8994
- Marcati P, Rubino B (1996). Parabolic relaxation limit for hyperbolic systems of conservation laws 45, part I (1996), 393–406.. RENDICONTI DEL CIRCOLO MATEMATICO DI PALERMO. SUPPLEMENTO, vol. 45, p. 393-406, ISSN: 1592-9531
- RUBINO, BRUNO (1996). Porous media flow as the limit of a nonstrictly hyperbolic system of conservation laws. COMMUNICATIONS IN PARTIAL DIFFERENTIAL EQUATIONS, vol. 21, p. 1-21, ISSN: 0360-5302, doi: <http://dx.doi.org/10.1080/03605309608821172>
- RUBINO B (1995). COMPACTNESS FRAMEWORK AND CONVERGENCE OF LAX-FRIEDRICH AND GODUNOV SCHEMES FOR A 2×2 NONSTRICTLY HYPERBOLIC SYSTEM OF CONSERVATION-LAWS. QUARTERLY OF APPLIED MATHEMATICS, vol. 53, p. 401-421, ISSN: 0033-569X
- RUBINO B (1994). APPROXIMATE SOLUTIONS TO THE CAUCHY-PROBLEM FOR A CLASS OF 2×2 NONSTRICTLY HYPERBOLIC SYSTEMS OF CONSERVATION-LAWS. BOLLETTINO DELL'UNIONE MATEMATICA ITALIANA. B, vol. 8B, p. 583-614, ISSN: 0392-4041
- RUBINO B (1993). ON THE VANISHING VISCOSITY APPROXIMATION TO THE CAUCHY-PROBLEM FOR A 2×2 SYSTEM OF CONSERVATION-LAWS. ANNALES DE L INSTITUT HENRI POINCARÉ. ANALYSE NON LINÉAIRE, vol. 10, p. 627-656, ISSN: 0294-1449