

Curriculum Luca Di Persio

PERSONAL DATA

Name	Di Persio Luca
Address	Via Marconi, 28 - 38052 Caldonazzo – Trento, Italy
Tel.	+39 45 8027968 mobile: +39 3397922014
Fax	+39 45 8027068
E-mail	luca.dipersio@univr.it – dipersioluca@gmail.com
Personal webpage	http://www.di.univr.it/?ent=persona&id=8773&lang=en
Citizenship	Italian
Date of birth	30/08/1972

WORK EXPERIENCE

Role	Associate Professor - October 2020 - ongoing
Date (from - to)	
Role	October 2017 – September 2020 RTDb [Dept. Comp.Science UniVr]
Date (from - to)	
Role	October 2012 – September 2017 RTDa [Dept. Comp. Science UniVr]
Date (from - to)	
Employer full specification	University of Verona – Department of Computer Science College of Mathematics Strada le Grazie 15 I-37134 Verona Italy
Institutional-didactic activities	<u>PROFESSOR OF PROBABILITY, STOCHASTIC PROCESSES AND MATHEMATICAL FINANCE:</u> responsible of the Mathematical Finance path within the Master degree in Mathematics. Steered courses: Probability, Stochastic Processes, Time Series Analysis, SDEs, Interacting Particle Systems (IPS) and applications to social/economic frameworks, Mathematical Finance, Stochastic Analysis, Probability for Data Science. Programme Director of the Master Degree in Data Science [Dept. of Comp.Science - UniVr] https://www.di.univr.it/?ent=cs&id=955&lang=en Member of the PhD School in Mathematics , jointly with the Mathematics Dept. of the University of Trento and by the College of Mathematics of the Department of Computer Science of the University of Verona Coordinator of the Erasmus+ exchange programmes with the Universities of: Bielefeld, München, Oslo, Wuppertal [College of Mathematics, Dept. of Computer Science – UniVr] Supervisor for the following PostDoc projects : “Equazioni differenziali stocastiche con salti in finanza matematica: applicazioni al prezzaggio, copertura, e problemi collegati alle misure di rischio” (1/7/2015-20/6/2015, Mat/06 – grant obtained by Immacolata Oliva); “Equazioni differenziali stocastiche con ritardo con salti: applicazioni al prezzaggio e al rischio di credito” (1/3/2016 – 28/2/2017, Mat/06- grant obtained by Viktor Bezborodov) ; “Sviluppo di controllori per sistemi stocastici switching e loro implementazione” (1/3/2017-ongoing – grant obtained by Viktor Bezborodov)

Research activities:

My research activity is mainly focused on the following topics:

- Stochastic (Partial) Differential Equations [S(P)DEs for short]
- Infinite dimensional analysis for S(P)DEs
- Stochastic optimisation
- Stochastic Mean Field Games
- Forward-backward S(P)DEs
- Malliavin calculus and its applications in Finance
- Stochastic port-Hamiltonian systems
- Ambit stochastics and related financial applications
- Interacting Particle Systems
- Time series analysis, regime switching and forecasting techniques
- Machine Learning, Neural Networks and applications

All the aforementioned lines of research have been and will be frequently applied to concrete problems arising in an heterogeneous set of applications, spanning from energy arena, to systems of interacting agents, and from the theory of modern mathematical finance, e.g. concerning the study of interacting banks systems (Stochastic Mean Field Games and related optimisation problems), pricing and hedging problems in presence of Lévy noise (S(P)DEs theory and Malliavin calculus analysis), forecasting energy markets (ambit processes and regime switching analysis), market contagion and market crashes (interacting systems from the IPS point of view), financial time series (PCA, multivariate statistical analysis, etc.), computations of relevant financial indexes by efficient numerical schemes (quantisation approach, Gibbs sampling, Polynomial Chaos Expansion methods, etc.), portfolio optimisation (stochastic optimisation, Eckaland variational principle), high frequency trading and forecasting also exploiting NNs approaches within the data science scenario.

Date (from - to)

April 2017 - ongoing

Work type

Cofounder and **Head of Research and Development** unit of High Performance Analytics (HPA), website: www.HPA8.com
HPA is an official SPINOFF of the University of Verona.

HPA is an innovative startup aiming at providing market predictive algorithms that can improve the performance of decision-making systems adopted by companies in every product market. The techniques use constitute an innovative mix of statistical-inferential approaches, continuous stochastic analysis, and ML-NNs based approaches to provide models for e.g., energy field (production and consumption forecasting), anomaly detection, technology forecasting, and price forecasting.

HPA won an European Starting Grant prize and a prize given by HIT (Hub Innovazione Trentino).

Date (from - to)

From February 2008 To December 2010

Project Goal

Three years grant financed by *Provincia Autonoma di Trento*

NEST Project (Stochastic Neurobiology) realized in collaboration with the Math.Dep.University of Trento–Scientific Coordinator: Prof. Sergio Albeverio (IAM-HCM Bonn). Goal: analyze stochastic perturbed deterministic model for neuronal activities, e.g., Hodgkin-Huxley and FitzHugh-Nagumo models to better understand the behaviour of concrete neuronal networks.

Date (from - to)

03/2007 – 01/2008

Employer name and address

Grant funded by the *Stochastic Processes Group*, University of Trento, Department of Mathematics – V. Sommarive,14,38123 (TN)

Project goal

Project title: *Feynman Path integrals using Probabilistic Methods*. under the supervision of Prof. Luciano Tubaro: use of probabilistic techniques to enlarge the set of problems treated by rigorous infinite dimensional integrals

Date (from - to)	11/2006 – 12/2006
Employer name and address	Grant funded by SFB611-Projekt - Bonn University. Probability and Stochastic Analysis Department, Endenicher Allee 60, D-53115 Bonn
Project Goal	Project title: Singular Phenomena and Scaling in Mathematical Models: investigate rigorous mathematical approach to singular phenomena in Physics and Biology
Date (from - to)	03/2006 – 08/2006
Employer name and address	European grant funded by the University of Bonn, <i>Probability and Stochastic Analysis Department, Endenicher Allee 60, D-53115 Bonn</i>
Project Goal	Project title: <i>Quantum probability and applications to Physics, Information Theory and Biology</i> : infinite dimensional probability approach to technological aspects at the edge between Biology and Information Theory
Date (from - to)	03/2002 – 08/2002
Employer name and address	Post Master Degree grant , funded by the University of Rome III, Math. Dept., L.go S.Leonardo Murialdo, 00146, Roma
Project Goal	Research project on <i>Random Walk in Random Media</i> also implementing numerical simulation under the supervision of Prof. Alessandro Pellegrinotti and in collaboration with Prof. Carlo Boldrighini (University of "La Sapienza", Rome) and Prof. Y.G. Sinai (Princeton University)
Academic Years	From 2005/2006 to 2008/2009
Employer name and address	University of Trento - Sciences Faculty, Math. Dept., V. Sommarive 14, 38123 (TN)
Duty type	National grant for the design and implementation of laboratories for the secondary schools within the project <i>Stochastic Phenomena and Applications in Physics</i> funded by the Italian National Program <i>Scientific Degrees</i> . Extensive use of statistical and mathematical packages

TEACHING

	University of Verona
Academic Year	From 2011/2012 To 2020/2021
Employer name and address	Dept. of Computer Science, Strada le Grazie 15, 37134 Verona
Duty type	<ul style="list-style-type: none"> ➤ 2020-2021 Academic Year <ul style="list-style-type: none"> • Mathematical Finance: 56 hours • Stochastic Calculus: 56 hours • Stochastic Processes: 8 hours • Advanced Topics in Financial Engineering: 32 hours ➤ 2019-2020 Academic Year <ul style="list-style-type: none"> • Mathematical Finance: 56 hours • Stochastic Calculus: 56 hours • Stochastic Processes: 8 hours • Advanced Topics in Financial Engineering: 32 hours ➤ 2018-2019 Academic Year <ul style="list-style-type: none"> • Stochastic Processes 48 hours • Mathematical Finance 56 hours • Stochastic Differential Equations 24 hours (plus 32 hours in co-presence steering Cooperint-grant funded by UniVr)

- 2017-2018 Academic Year
 - Stochastic Processes 52 hours
 - Mathematical Finance 20 hours
 - Stochastic Differential Equations 48 hours

- 2016-2017 Academic Year
 - Stochastic Processes: 40 hours
 - Mathematical Finance: 20 hours
 - Interacting Particle Systems: 8 hours *team teaching* with Prof. Yuri Kondratiev (Bielefeld University)
 - Advanced Quantitative Methods for Mathematical Finance: 24 hours
 - Multivariate Statistics: 12 hours *team teaching* with prof. Lucian Maticiuc (Iona Cuza University)
 - Stochastic Differential Equation: 12 hours *team teaching* with prof. Viorel Barbu (IASI, Romania)
 - Stochastic control and portfolio optimization: 4 hours *team teaching* with prof. Luciano Campi (LSE - London)
 - Stochastic analysis and applications to economics, social and biological sciences: 12 hours *team teaching* with prof. Sergio Albeverio (IAM-Bonn, IZKS, CERFIM)

- 2015-2016 Academic Year
 - Stochastic Processes: 40 hours
 - Mathematical Finance: 20 hours
 - Interacting Particle Systems with applications in Finance: 8 hours *team teaching* with Prof. Yuri Kondratiev (Bielefeld University)
 - Lévy processes with applications in financial modeling: 4 hours *team teaching* with Prof. Giulia Di Nunno (Oslo University)
 - A primer on stochastic control and portfolio optimization: 4 hours *team teaching* with Prof. Luciano Campi (LSE - London)
 - Advanced Quantitative Methods for Mathematical Finance: 24 hours
 - Stochastic Differential Equation: 16 hours *team teaching* with prof. Yuliya Mishura (Kyiv University)
 - Multivariate Statistics: 12 hours *team teaching* with prof. Lucian Maticiuc (Iona Cuza University)

- 2014-2015 Academic Year
 - Probability: 40 hours
 - Mathematical Finance: 20 hours
 - Interacting Particle Systems with Applications in Finance: 8 hours *team teaching* with Prof. Jan Swart (UTIA-ASCR)
 - Interest rate options: 8 hours *team teaching* with Prof. Carl Chiarella (Sidney University)
 - Stochastic Differential Equations: 16 hours *team teaching* with Prof. Viorel Barbu (Iasi University)
 - Multivariate Statistics: 12 hours *team teaching* with Prof. Lucian Maticiuc (Iona Cuza University)

- 2013-2014 Academic Year
 - Probability: 40 hours
 - Mathematical Finance: 20 hours
 - Introduction to Lévy processes with applications in financial modelling: 8 hours *team teaching* with Prof. Giulia Di Nunno (Oslo University)
 - Girsanov and Feynman-Kac theorems with applications to SDEs: 12 hours *team teaching* with Prof. Sergio Albeverio (IAM-Bonn, IZKS, CERFIM)

- 2012-2013 Academic Year
 - Probability: 48 hours (theory) + 12 hours (exercises)
 - Stochastic Processes: 24 hours
 - Mathematical Finance: 20 hours

Past didactical activities (before obtaining the Assistant Professor position at Verona University)

- Lecturer for *Probability*, Bachelor degree in Applied Mathematics - a. y. 2011/2012
- Lecturer for *Probability and Statistics*, Bachelor degree in Informatics - a. y. 2011/2012
- Seminars cycle at CIFREM (International PhD School in Economics – University of Trento), 2/10/2007 – 5/10/2007
- Seminars cycle at CIFREM (International PhD School in Economics – University of Trento), 5/11/2007 – 26/11/2007

University of Trento

- Academic Year From 2003/2004 To 2012/2013
- Employer name and address University of Trento
 - Sciences Faculty, Math. Dept., V. Sommarive 14, 38123 (TN)
 - Engineering Faculty, V. Mesiano 77, 38100 (TN)
 - Cognitive Sciences Faculty, C.so Bettini 84, 38068 (TN)
 - Economics Faculty, V. Inama, 5, 38122 Trento
- Duty type
 - Lecturer: *Mathematical Finance*, Master degree in Mathematics - from 2010/11 to 2012/13
 - Teaching Assistant: *Probability and Statistics*, Bachelor degree in Informatics - from 2003/2004 to 2012/13
 - Teaching Assistant: *Mathematical Models and Statistics*, Bachelor degree in Engineering - a. y. 2011/12
 - Lecturer_ *Probability*, Bachelor degree in Cognitive Sciences - from 2009/2010 to 2011/12
 - Teaching Assistant: *Probability and Statistics*, Bachelor degree in Informatics - from 2003/2004 to 2012/13
 - Lecturer for *Probability*, Bachelor degree in Cognitive Sciences - from 2009/2010 to 2011/2012
 - Lecturer: *Stochastic Processes*, Master degree in Mathematics- 2008/09
 - Lecturer: *Introduction to Probability and Stochastic Processes*, International PhD School in Economics - 2007/08
 - Teaching Assistant: *Calculus II*, Bachelor degree in Engineering -. 2007/2008

University of Bozen

- Academic Year From 2009/2010 To 2010/2011
- Employer name and address University of Bozen, Economics Faculty, Piazza Università 1, 39100 (BZ)
- Duty type
 - Teaching Assistant: *Statistics B*, Bachelor degree in Economics - 2010/2011
 - Lecturer: *Mathematics of Finance A*, Master degree in Economics - 2010/2011
 - Teaching Assistant: *Mathematics of Finance B*, Master degree in Economics - 2009/11

University of Rome III

- Academic Year From 2000/2001 to 2001/2002
- Employer name and address University of Rome III
 - Department of Mathematics - Largo S.Leonardo Murialdo, 00146, Roma
- Duty type
 - Teaching Assistant for *Mathematical Physics Foundations*, Master degree in Mathematics - a. y. 2001/2002

- Teaching Assistant for *Hamiltonian formalism*, Master degree in Mathematics - a. y. 2001/2002
- Teaching Assistant for *Qualitative theory of Motion*, Master degree in Mathematics - a. y. 2001/2002
- Teaching Assistant for *Probability*, Bachelor degree in Mathematics - from 2000/2001 to 2001/02
- Teaching Assistant for *Ordinary Differential Equations*, Master degree in Mathematics - 2000/01

PhD, MSc, Bachelor students

University of Verona and University of Trento

- Academic Year From 2012/2013 To 2019/2020
 - Employer name and address University of Verona – Department of Computer Science
Strada le Grazie 15 I-37134 Verona Italy
University of Trento
Sciences Faculty, Math. Dept., V. Sommarive 14, 38123 (TN)
 - Duty type **Scientific responsible** for several students (in particular) of the PhD program in Mathematics, jointly developed by the Mathematics Department of the University of Trento and the Computer Science Department of the University of Verona:
 - Francesco Giuseppe Cordoni (PhD obtained in 2016)
 - Chiara Benazzoli (PhD obtained in 2018)
 - Luca Prezioso (PhD obtained in 2020)
 - Francesco Guida (ongoing)
 - Andrea Veronese (ongoing-position funded by FAIRMAT)
 - Federico Vesentini (co-supervised with prof. R. Muradore-ongoing)
 - Matteo Garbelli (start: 10/2020 – ongoing)
- Supervisor of**
30 Bachelor students
35 Master students

MEMBERSHIPS

- Date Since 2003
 - Scientific association GNAMPA - Gruppo Nazionale per l'Analisi Matematica, la Probabilità e le loro Applicazioni (National Group for Analysis, Probability and their Applications)
 - Date Since 2013
 - Scientific association A.M.A.S.E.S. - *Associazione per la Matematica Applicata alle Scienze Economiche e Sociali* (Italian Association for Applied Mathematics, Economical and Social Sciences)
-
- Date Since 2013
 - Scientific association Bernoulli Society

COORDINATOR OF FINANCED PROJECTS

- Period 29/3-31/12 2016
- Funded by Befree

- Duty type Scientific supervisor for “Stochastic approach for forecasting and hedging in energy markets”
- Period 18/11/2016 – 31/7/2017
- Funded by Sinergetica
- Duty type Scientific supervisor for “Energy markets management by stochastics methods”
- Period 12/1/2017 - 30/9/2017
- Funded by Fairmat
- Duty type Scientific supervisor for “Advanced numerical methods for financial forecasting”
- Period 1 year
- Funded by GNAMPA
- Duty type Scientific supervisor for “Stochastic Partial Differential Equations and Stochastic Optimal Transport with Applications to Mathematical Finance” (2016)
- Period 15 days
- Funded by GNAMPA
- Duty type Joint project on "Stochastic optimal transport and applications" with prof. Rémi Lassale (Paris Jussieu) (2016)

MEMBER OF FINANCED PROJECTS

- Period 13 March – 9 April 2018
- Funded by CIRM-FBK-UNITN-INdAM
- Duty type Member of the project Research in Pairs:” Path dependent partial differential equations with nonlinear boundary conditions”, with Lucian Maticiuc (“Gheorghe Asachi” Technical University) and Adrian Zalinescu (“O. Mayer” Institute of Mathematics Romanian Academy, Iași)
- Period 1 year
- Funded by GNAMPA
- Duty type Metodi di controllo ottimo stocastico per l’analisi di problem debt management, coordinator Dr. A. Marigonda (2017)
- Period 1 year
- Funded by GNAMPA
- Duty type Research member of the project “Set valued theory and applications to optimal transport and finance”, coordinator Dr. A. Marigonda (2015)
- Period 1-8 November 2015
- Funded by CIRM-FBK-UNITN
- Duty type Member of the project Research in Pairs McKean-Vlasov dynamics with Lévy noise with applications to systemic risk, joint with Prof. Luciano Campi- LSE, London, financed by CIRM-FBK-UNITN (2015)
- Period Starting in 2013 - total duration:18 months
- Funded by King Fahd University of Petroleum & Minerals
- Duty type Research member within the "Invariant measures for stochastic differential equations driven by Lévy noise", project, principal investigator Prof. S. Albeverio, financed by King Fahd University of Petroleum & Minerals (2013-2014)

- Period 9-15 March 2014; 12-14 November 2014
- Funded by CIRM-FBK-UNITN
- Duty type Research member and proposer of the Research in Pairs Explicit invariant measures for stochastic differential equations driven by Lévy noise and applications project, joint with Prof. Sergio Albeverio- IAM-HCM Bonn, financed by CIRM-FBK-UNITN (2013-2014)
- Further (old) projects
 - Member of “Stochastic Processes group”, 2003/06 Math. Dep. Univ. of Trento
 - Former member of the EU-Projekt Quantum probability with applications to Physics, Information Theory and Biology
 - Former member of the SFB611-Projekt Singular Phenomena and Scaling in mathematical Models
 - Former member of the Cluster of Excellence: Mathematics: Foundations, Models, Applications, Mathematics Department, University of Bonn
 - PRIN - Progetti di Rilevante Interesse Nazionale (Projects of Relevant National Interest) - funded by MIUR (Ministero dell'Istruzione, dell'Università e della Ricerca - Ministry of Education, University and Research) - various projects within the Probability network supervised (during years) by professors: B. Da Prato (Univ. of Pisa), L. Tubaro (Univ. of Trento), M. Fuhrman (Univ. of Milan), L. Lunardi (Univ. of Parma)

REFEREE /MEMBER EDITORIAL BOARD

- Name of Journal “Scienze e Ricerche” journal
- Duty type Member of the **Editorial Board**
- Name of Journal Risks Special Issue: "New challenges in Mathematical Finance: from S(P)DEs to Machine Learning"
- Duty type **Guest Editor**
- Name of Journal ICCMSE2020
- Duty type **Guest Editor** of the Symposium “Stochastic Differential Equations and Machine Learning: old challenges and new perspectives”
- Name of Journal RISKS
- Duty type Member of the **Journal Topic Board**
- Name of Journal “Smart green applications: from renewable energies management to intelligent transportation systems” - Special Issue Energies Journal (ISSN: 1996-1073)
- Duty type Special **Issue Editor**
- Name of Journal “Digital Finance: Smart Data Analytics, Fin.I Tech. Investment Innovation”
- Duty type **Associate Editor**
- Name of Journal “Financial Blockchain” (part of Frontiers in Blockchain)
- Duty type **Review Editor**
- Name of Journal Energies: special issue: “A Holistic Overview of the Energy Sector: From Engineering Approaches to Innovative ML Solutions”
- Duty type **Special issue Editor**

Referee for

- Advances in Difference Equations
- AMS
- Applied Soft Computing (ASOC)
- Automatica
- Complexity
- CoDIT 2020: 7th Int. Conf. on Control, Decision, Information Tech.
- Expert Systems with Applications
- Financial Innovation
- Journal of Computational and Applied Mathematics
- Journal of Dynamical and Control Systems
- Stochastic Processes and Applications
- Energies
- Vietnam Journal of Mathematics
- Measurement
- International Conf. on Phys.Math and Stat. [ICPMS2018]
- IEEE Transaction on Automatic Control
- IEEE Transactions on Systems, Man and Cybernetic: Systems
- IEEE Access
- Board member: 6th Int.Conf.Control, Decision and Inf.Tech (CODIT'19)
- Board member and reviewer CODIT2020
- Scientometrics
- Journal of Mathematics Research
- Systems Science and Control Engineering
- Khayyam Journal of Mathematics
- Rivista di Matematica della Università di Parma
- International Journal of Applied Mathematics
- Int. Journal of Mathematical Models and Methods in Applied Sciences
- Systems Science and Control Engineering
- RISKS
- The Open Statistics & Probability Journal
- Transactions on Mathematics
- Journal of Inequalities and Applications
- Statistics and Probability Letters
- Science and Control Engineering An Open Access Journal

GIVEN TALKS

- Conference and date
 - Mean field games with controlled jumps and applications in Finance, Symmetries and Invariance in Stochastic Dynamics, 17-19 September 2017
 - Stochastic models for wind energy markets, Frontiers of Interdisciplinary Mathematics, 9-11 May 2017
 - Polynomial Chaos Expansion approach to Financial Modelling, 22 August 2016, CCMA Luncheon Seminar - Department of Mathematics, Penn State University
 - Mean-Field Games with Controlled Jumps, 22 August 2016, Computational and Applied Mathematics Colloquium, - Department of Mathematics, Penn State University
 - Stochastic Geometric Mechanics, Semester at CIB – Lausanne, Switzerland, January-June 2015
 - Bank contagion: the spread of defaults, NOLASC'15, Non-Linear Analysis, Non-Linear Systems and Chaos, Conference, 7-9 November 2015, Rome
 - Polynomial chaos expansion approach to financial modelling, 7th General AmaMeF and Swissquote Conference (7-10, September 2015 - Lausanne)
 -

- Maximum likelihood approach to Markov Switching models, AICT 2015 (June 27-29, 2015 -Salerno)
- Geometric mechanics, Variational and Stochastic methods (3-6, June 2015 - Lausanne)
- Växjö-Trento (Sweden-Italy) Afternoon on Control, Stochastic Processes and Financial Mathematics, 10 March 2015, Trento
- Interacting particle systems in thermodynamic models (26-30, January, 2015, L'Aquila)
- Stochastic Partial Differential Equations and Applications-IX (6-11, Jan.,2014- Levico)
- Italien-German training for stochastic modelling of financial crisis (9-16, December 2013, Wuppertal)
- The Challenging CCR evaluation problem: the BLT approach for some Exotic options, with M. Bonollo and I. Oliva, 39th AMASES meeting, 10-12 September 2015
- Polynomial Chaos Expansions approach to Interest rate models, with M. Bonollo and G. Pellegrini, 39th AMASES meeting, 10-12 September 2015
- Stochastic functional delay differential equations with jumps and applications to option pricing, with F. Cordini, Dublin, 15, May 2015
- Stochastic delay differential equations with Lévy noise and applications to Mathematical Finance, with F. Cordini, during the Sweden-Italy workshop Afternoon on Control, Stochastic Processes and Financial Mathematics, 10th of March 2015, Trento
- A Quantization Approach to the Counterparty Credit Exposure Estimation, with I. Oliva, M. Bonollo and A. Semmoloni, XVI workshop on Quantitative Finance, 29-30, January, 2015, Parma
- Stochastic delay differential equations with jumps and applications in mathematical finance, with F. Cordini, XVI workshop on Quantitative Finance, 29-30, January 2015, Parma
- Execution strategy in liquidity framework: optimality conditions, with C. Benazzoli, Dependence in Risk Measurement and Risk Management, 18-19, December, 2014, Firenze
- Small noise asymptotic expansion for the infinite dimensional Van der Pol oscillator, 8th International Conference on Applied Mathematics, Simulation, Modelling, 22 November 2014
- Multiscale asymptotics for stochastic volatility models, Stochastic Partial Differential Equations and Applications – IX, 6-11 January 2014
- SDDs and applications to pricing and hedging, with I. Oliva and F. Cordini, Dependence in Risk Measurement and Risk Management, 18-19, December 2014, Firenze
- Optimal execution strategy in liquidity framework under exponential market impact, with C. Benazzoli during the Euro Working Group for Commodities and Financial Modelling conference, 4-6, December 2014, Milano
- Stochastic delay differential equations with jumps and applications to pricing and hedging, with I. Oliva, Recent advances in Mathematical Finance, 21-22, September 2014, Padova
- Laplace and Crystals, Kolmogorov equations conference, Pisa 8-11 January 2009
- Small noise asymptotic expansions for SPDE's with dissipative polynomially bounded non-linearity, *"First Pat-CRS NeST Project Neurostochastics"*, Math Dept. University of Trento, 23-25 November 2009

WORKSHOPS AND CONFERENCES

- *Period* 25-66 April 2021
- *Conference title* FEMIB 2021, 3rd International Conference on Finance, Economics, Management and IT Business
 - *Venue* Prague, Czech republic
 - *WebSite* <http://www.femib.scitevents.org/> [program committee member]
- *Period* 5-6 May 2020
- *Conference title* FEMIB 2020, 2nd International Conference on Finance, Economics, Management and IT Business
 - *Venue* Prague, Czech republic
 - *WebSite* <http://www.femib.scitevents.org/> [program committee member]
- *Period* 2nd Semester 2017/2018 academic year
- *Conference title* Verona-Paris Stochastic Modelling Semester, VPSMS'18
 - *Venue* University of Verona – Department of Computer Science
 - *WebSite* <http://vpsms2018.org/>
- *Period* May 10-11, 2018
- *Conference title* Workshop: “Two days on Stochastic Control and Applications”
 - *Venue* University of Verona – Department of Computer Science
 - *web site* <http://vpsms2018.org/event/two-days-workshop-on-stochastic-analysis-and-applications/>
- *Period* February 5, 2018
- *Conference title* Workshop: “One day on Stochastic Analysis”
 - *Venue* University of Verona – Department of Computer Science
 - *web site* <http://vpsms2018.org/event/workshop-one-day-in-stochastic-analysis/>
- *Period* December 18-21, 2017
- *Conference title* Opening Conference VPSMS2018
 - *Venue* University of Verona – Department of Computer Science
 - *web site* <http://vpsms2018.org/event/opening-conference/>
- *Period* October 23-24, 2017
- *Conference title* Launch-Meeting VPSMS2018
 - *Venue* University of Verona – Department of Computer Science
 - *web site* <http://vpsms2018.org/event/launch-meeting/>
- *Period* April 21-25, 2017
- *Conference* ICCMSE 2017 -Computational Methods in Science and Engineering
 - *Venue* Thessaloniki, Greece
 - *web site* http://www.iccmse.org/sites/default/files/Leaflet_ICCMSE_2017.pdf
- *Period* September 4-11, 2016
- *Workshop title* Modelling Week
 - *Venue* University of Verona – Department of Computer Science
 - *web site* <http://profs.scienze.univr.it/caliari/phdmw/>

- Period 5 - 6 October 2015
- Workshop title Stochastics and Symmetry: theory and applications from Mechanics to Finance.
- Venue Università Statale di Milano
- web site <http://users.mat.unimi.it/users/ugolini/workshop2015/>

- Period 23 October 2015
- Workshop title Stochastic symmetries: a breakthrough to Financial innovations
- Venue University of Verona – Department of Computer Science
- web site <http://www.di.univr.it/?ent=iniziativa&id=6202&lang=it>

- Period 10 April 2015
- Workshop title Industrial Mathematics Workshop (IM1) (sponsored by Department of Computer Science, University of Verona and IASON Ltd.)
- Venue University of Verona – Department of Computer Science
- web site <http://www.di.univr.it/dol/main?ent=iniziativa&convegno=1&id=5905>

- Period 24 January 2012
- Workshop title MatFinTn2012
- Venue University of Trento – Department of Mathematics

- Period 22-24 November 2010
- Workshop title Second workshop on Stochastic Neurobiology
- Venue University of Trento – Department of Mathematics

- Period 25-31 January 2010
- Workshop title First joint CIRM-HCM Workshop
- Venue Levico Terme (*University of Trento*)

- Period 23-25 November 2009
- Workshop title First workshop on Stochastic Neurobiology
- Venue University of Trento – Department of Mathematics

Courses and Seminars

- Period 2013-2020
- Teachers and courses
 - “Advanced topics in financial engineering” (6CFU-flipped-classroom course) jointly organized with ARPM (2nd semester AY 2019/2020)
 - Luciano Campi: “Stochastic Mean Field Games and applications”, April 2020
 - Adrian Zalescu: “An introduction to Stochastic Calculus towards NNs”, March 2020
 - Viorel Barbu: “Stochastic (partial) Differential Equations and applications”, April-May, 2020
 - Affine and Polynomial processes with applications in Finance – Christa Cuchiero EPFL Zurich- 25th to 29th of March (2019) – 10 hours - 2 ECTS
 - Stochastic control and Mean Field Games – Luciano Campi – London School of Economics London – 29th of April to 4th of May – 8 hours – 2 ECTS
 - Stochastic Partial Differential Equations: real world applications and Machine Learning Methods – Adrian Zalescu - Alexandru Ioan Cuza" University of Iasi and “Octav Mayer” Mathematics Institute of the Romanian Academy – 13th of May to 7th of June – 24 hours – 3 ECTS
 - Tyll Krueger (Wroclaw University of Technology): Multivariate Advanced

- Statistics - 17th of October – 16th of November, 2018 [24 hours – 3 ECTS]
 - Yuri Kondratiev, Statistical dynamics and Kinetics of Interacting Particle Systems, 8,9,11,15,16,18 of May 2018
 - Adrian Zalescu (*University Alexandru Ioan Cuza - Iași*), BSDEs with time-delayed generators and associated path-dependent nonlinear Kolmogorov equations, 19-20, April 2018 (at Dept.Math-UniTn joint with CIRM-FBK)
 - Luciano Campi, An Introduction to Stochastic Control and Portfolio Optimization, 11,12,13 of April 2018
 - Zenghu Li, Continuous State Branching Processes, 4,5,6 of April 2018
 - Oleksander Honchar, Neural Networks for Time Series Analysis, 21,23,28,30 of March 2018
 - Seminars Cycle in Data Science and Machine Learning, speakers: M. Stecca, J. Radaelli, R. Zenti;9,12,14 of March 2018
 - Yuri Kondratiev, IPS and applications, May 2017
 - Lucian Maticiuc: Multivariate Statistics and Applications in Finance, March-April 2017
 - Luciano Campi, Mean field game and applications in Finance, March 2017
 - Adrian Zalescu, BSDEs with applications in Finance, March 2017
 - Luca Di Persio (University of Verona) – Michele Bonollo (IMT Lucca), Quantitative tools for finance (Practitioners from various companies, 30 h, Spring 2016)
 - Giulia Di Nunno (University of Oslo), Lévy processes with applications in financial modelling (2016)
 - Luciano Campi (LSE London), A primer on stochastic control and portfolio optimization (2016)
 - Adrian Zalescu (University Alexandru Ioan Cuza - Iași), Backward Stochastic Differential Equations and Applications to Mathematical Finance (2016)
 - Viktor Bezborodov (University of Verona), Introduction to Interacting Particle Systems and applications (2016)
 - Yuri Kondratiev (University of Bielefeld), Statistical dynamics of interacting particle systems (2016)
 - Paolo Guasoni (Dublin City University), Lectures on Portfolio Choice and Asset Pricing (2015)
- Venue University of Verona – Department of Computer Science

ORGANISED SEMINARS

- Period 2013-2016
- Speakers and seminar titles
 - Giovanni Barone Adesi (Università della Svizzera Italiana), WTI Crude oil option implied VaR and CVaR: an empirical application (September, 2016)
 - Alberto Bressan (The Pennsylvania State University), Noncooperative Differential Games (March, 2016)
 - Michele Bonollo (IMT Lucca - IASON) e Luca Di Persio, Il rischio e la sua remunerazione nel portafoglio Crediti. Dal Funding al Credit VaR al Pricing dei loans (December 2015)
 - Sergio Albeverio (University of Bonn), Symmetries and stochastic differential equations (October, 2015)
 - Sara Pisoni (ITAS), Insurance, reinsurance and Probability: how to gain a Msc in Mathematics and live happy (April, 2015)
 - Matteo Tesser (Fairmat), Coherent and non-coherent risk measures: a numerical approach via Least Squares Monte Carlo techniques (January, 2015)
 - Fabio Castellaneta and Barbara Visintin (Generali group), Managing Investments for an Insurance Company (January, 2015)

- Michele Bonollo (IMT-Lucca), Market Risk and the FRTB (R) - Evolution? Review and Open Issues (January, 2015)
 - Anna Fattor (Pensplan), Risk Management: reporting and related quantitative models (January, 2015)
 - Riccardo Milano (Banca Etica) La finanza etica: una modalità economica che può aiutare l'attuale orizzonte finanziario? (December, 2014)
 - Lucian Maticiuc (G. Asachi University), Path dependent partial differential equation with applications in Mathematical Finance (November, 2014)
 - Luciano Campi (LSE), Utility indifference valuation for non-smooth payoffs with an application to power derivatives (July, 2014)
 - Lucian Maticiuc (G. Asachi University), Stochastic delay systems and optimal control problems (April, 2014)
 - Sergio Albeverio (IAM-Bonn) From integrals and asymptotics to (deterministic, stochastic, quantum) dynamical systems (March, 2014)
 - Matteo Tesser (Fairmat), Modellizzazione quantitativa di strumenti finanziari derivati (February, 2014)
 - Michele Bonollo (Credito Trevigiano), The Counterparty Risk Challenge; Mathematical Modeling, Algorithmic Efficiency or IT Architecture ? (December, 2013)
 - Enrico Edoli, Introduzione ai mercati energetici in Italia, Aleph Energy (November, 2013)
 - Diego Giovannini and Luigi Cefis (Intesa Sanpaolo), Derivative pricing and risk management (November 2013)
 - Florian Schwiendbacher and Anna Fattor, Pensplan Bolzano, (November, 2013)
 - Birgit Rudloff (Princeton University), Risk measures for multivariate risks, (June 2013)
 - Enrico Edoli (Aleph Energy), Pricing di contratti strutturati nei mercati energetici (May, 2013)
 - Elena Scandola (CCB-Trento) Backward Stochastic Differential Equations with Lévy Noise in Finance (April 2013)
 - Paola Rensi (PWC-Milano) Beyond Black and Scholes: local volatility, stochastic volatility and asymptotics (April, 2013)
 - Alessandro Di Lorenzo (PWC-Milano), Come Solvency II cambierà la quantificazione dei requisiti di solvibilità per le compagnie assicurative (April, 2013)
 - Giorgia Callegaro (Padova University), Portfolio optimization in a defaultable market under incomplete information (March 2013)
- Venue University of Verona – Department of Computer Science
- Period 2016
- Speakers and seminar titles
 - Viktor Bezborodov (Department of Computer Science, University of Verona), Asymptotic shape for continuous space birth processes
 - Yuliya Mishura (Taras Shevchenko - National University of Kyiv, Ukraine), With Gaussian processes and between two self-similarities
 - Luciano Campi (LSE London), On the support of extremal martingale measures
- Venue University of Trento – Department of Mathematics

EDUCATION

- Date From November 2002 To December 2006
- Name of the Institute Trento University – Sciences Faculty, Department of Mathematics
- Obtained degree PhD in Mathematics (advisor Prof. Luciano Tubaro)

- Date From November 2003 To December 2006
- Name of the Institute Bonn University – Mathematics Department
- Obtained degree Doctor Rerum Naturalium (advisor Prof. Sergio Albeverio)
- Obtained Rank Maximum score: *Magna cum Laude*

- Date From October 1996 To February 2002
- Name of the Institute University of Rome III – Sciences Faculty, Department of Mathematics
- Obtained Degree Mathematics Degree
- Obtained Rank Maximum score: 110 /110 *cum Laude* – best possible average 30/30

- Date From September 1986 To June 1981
- Name of the Institute Technical Secondary School – “Giuseppe Armellini”, Roma
- Obtained Degree Informatics Analyst
- Obtained Rank Maximum score: 60/60

Note: due to a serious familiar mourning I have been engaged in a working activity, outside from the Academia, during the period from 1991 to 1996

PERSONAL SKILLS

Mother tongue	Italian
Other spoken languages	English <ul style="list-style-type: none"> ➤ Read: excellent ➤ Write: excellent ➤ Speak: good
Organizing skills	Propensity to work in team concerning scientific as well as bureaucratic tasks. Proven skills in organizing meetings and workshops spanning from small to big dimension. Concrete capacities to prepare project and initiatives in order to obtain external funding and sponsorships, also exploiting proactive collaboration with the private sector, particularly with Banks, Insurances and Financial players in general. I have been the scientific supervisor of about 20 Bachelor degree students, 25 Master degree students, 4 PhD students and I am also responsible for three Post-Doc degree grants, one of which is in collaboration with a private society acting on the energy financial market.
Technical skills	Good knowledge of the major software currently used under different operating systems. Proven ability to work numerically by using standard mathematical packages, e.g., Mathematica, Maple, R, etc. Excellent knowledge of different programming languages, e.g., Pascal, C++, and not WYSIWYG text-composer, e.g., TeX, LaTeX, etc.
Theoretical skills	Expert in probability, stochastic processes, stochastic (partial) differential equations, asymptotic expansions of (probabilistic) integrals, system of interacting particles and statistics, random walk in random media, with application to, e.g., financial mathematics, biological systems, neuronal activities, networks of interacting agents, time series analysis, market forecasting, etc. Innovative publications in heterogeneous fields spanning from quantum Brownian motion to random walks in random media and asymptotic for integrals with application to physics, from quantum information to stochastic (systems of) partial differential equations (also on networks and with delay/memory effects), from Lie symmetries approach to financial modelling to numerical methods for option pricing and stochastic partial differential equations with applications in finance.
Driving License	European driving license for car

Luca Di Persio Publications (extracted from SCOPUS repository: 26th of October 2020)

Scopus

EXPORT DATE:26 Oct 2020

Bonollo, M., Di Persio, L., Oliva, I.

A quantization approach to the counterparty credit exposure estimation
 (2020) *International Review of Economics and Finance*, 70, pp. 335-356.
 DOI: 10.1016/j.iref.2020.08.005

Benazzoli, C., Campi, L., Di Persio, L.

Mean field games with controlled jump-diffusion dynamics: Existence results and
 an illiquid interbank market model
 (2020) *Stochastic Processes and their Applications*, 130 (11), pp. 6927-6964.
 DOI: 10.1016/j.spa.2020.07.004

Cordoni, F.G., Di Persio, L., Prezioso, L.

A lending scheme for a system of interconnected banks with probabilistic
 constraints of failure
 (2020) *Automatica*, 120, art. no. 109111.
 DOI: 10.1016/j.automatica.2020.109111

Cordoni, F., Di Persio, L., Jiang, Y.

A bank salvage model by impulse stochastic controls
 (2020) *Risks*, 8 (2), art. no. 60, pp. 1-31.
 DOI: 10.3390/risks8020060

Barbu, V., Benazzoli, C., Di Persio, L.

Feedback Optimal Controllers for the Heston Model
 (2020) *Applied Mathematics and Optimization*, 81 (3), pp. 739-756.
 DOI: 10.1007/s00245-018-9517-6

BEZBORODOV, V., DI PERSIO, L., KRUEGER, T., TKACHOV, P.

Spatial growth processes with long range dispersion: Microscopics, mesoscopics
 and discrepancy in spread rate
 (2020) *Annals of Applied Probability*, 30 (3), pp. 1091-1129.
 DOI: 10.1214/19-AAP1524

Cordoni, F., Di Persio, L., Maticiuc, L., Zălinescu, A.

A stochastic approach to path-dependent nonlinear Kolmogorov equations via BSDEs
 with time-delayed generators and applications to finance
 (2020) *Stochastic Processes and their Applications*, 130 (3), pp. 1669-1712.
 DOI: 10.1016/j.spa.2019.05.013

Bezborodov, V., Di Persio, L., Krueger, T.

A Shape Theorem for a One-Dimensional Growing Particle System with a Bounded
 Number of Occupants per Site
 (2020) *Journal of Theoretical Probability*.
 DOI: 10.1007/s10959-020-01032-x

Di Persio, L., Oliva, I., Wallbaum, K.

Options on constant proportion portfolio insurance with guaranteed minimum
 equity exposure
 (2020) *Applied Stochastic Models in Business and Industry*.
 DOI: 10.1002/asmb.2547

- Bezborodov, V., Di Persio, L., Muradore, R.
Stabilization of planar non-Markovian switched linear systems with unbounded random delays
(2020) *European Journal of Control*.
DOI: 10.1016/j.ejcon.2020.05.007
- Bezborodov, V., Di Persio, L., Finkelshtein, D., Kondratiev, Y., Kutoviy, O.
Fecundity regulation in a spatial birth-and-death process
(2020) *Stochastics and Dynamics*.
DOI: 10.1142/S0219493720500380
- Albeverio, S., Cordonni, F., Di Persio, L., Pellegrini, G.
Asymptotic expansion for some local volatility models arising in finance
(2019) *Decisions in Economics and Finance*, 42 (2), pp. 527-573.
DOI: 10.1007/s10203-019-00247-w
- Benazzoli, C., Campi, L., Di Persio, L.
 ε -Nash equilibrium in stochastic differential games with mean-field interaction and controlled jumps
(2019) *Statistics and Probability Letters*, 154, art. no. 108522.
DOI: 10.1016/j.spl.2019.05.021
- Baños, D.R., Cordonni, F., Di Nunno, G., Di Persio, L., Røse, E.E.
Stochastic systems with memory and jumps
(2019) *Journal of Differential Equations*, 266 (9), pp. 5772-5820.
DOI: 10.1016/j.jde.2018.10.052
- Bezborodov, V., Di Persio, L., Mishura, Y.
Option Pricing with Fractional Stochastic Volatility and Discontinuous Payoff Function of Polynomial Growth
(2019) *Methodology and Computing in Applied Probability*, 21 (1), pp. 331-366.
DOI: 10.1007/s11009-018-9650-3
- Cordonni, F., Di Persio, L.
Optimal control for the stochastic fitzhugh-nagumo model with recovery variable
(2018) *Evolution Equations and Control Theory*, 7 (4), pp. 571-585.
DOI: 10.3934/eect.2018027
- Collotta, M., De Marchis, M., Messineo, A., Pau, G., Di Persio, L.
Preface of the symposium "advanced Engineering Systems and Computer Applications: Theory and Practice"
(2018) *AIP Conference Proceedings*, 2040, art. no. 140001.
DOI: 10.1063/1.5079190
- Barbu, V., Benazzoli, C., Di Persio, L.
Mild solutions to the dynamic programming equation for stochastic optimal control problems
(2018) *Automatica*, 93, pp. 520-526.
DOI: 10.1016/j.automatica.2018.02.008
- Benth, F.E., Di Persio, L., Lavagnini, S.
Stochastic modeling of wind derivatives in energy markets
(2018) *Risks*, 6 (2), art. no. 56.
DOI: 10.3390/risks6020056
- Bezborodov, V., Di Persio, L., Krueger, T., Lebid, M., Ozański, T.
Asymptotic shape and the speed of propagation of continuous-time continuous-space birth processes
(2018) *Advances in Applied Probability*, 50 (1), pp. 74-101.
DOI: 10.1017/apr.2018.5

Di Persio, L., Prezioso, L.

Affine type analysis for BESQ and CIR processes with applications to mathematical finance

(2018) Contributions to Management Science, pp. 137-148.

DOI: 10.1007/978-3-319-95285-7_8

Di Persio, L., Gugole, N.

Explicit computation of the post-crisis spot LIBOR in a jump-diffusion framework

(2018) Contributions to Management Science, pp. 61-83.

DOI: 10.1007/978-3-319-95285-7_4

Di Persio, L., Honchar, O.

Multitask machine learning for financial forecasting

(2018) International Journal of Circuits, Systems and Signal Processing, 12, pp. 444-451.

Benazzoli, C., Di Persio, L.

Optimal execution strategy in liquidity framework under exponential temporary market impact

(2018) International Series in Operations Research and Management Science, 257, pp. 251-265.

DOI: 10.1007/978-3-319-61320-8_12

Bonollo, M., Di Persio, L., Prezioso, L.

The Default Risk Charge approach to regulatory risk measurement processes

(2018) Dependence Modeling, 6 (1), pp. 309-330.

DOI: 10.1515/demo-2018-0018

Collotta, M., Sun, Y., Di Persio, L., Ebeid, E.S.M., Muradore, R.

Smart green applications: From renewable energy management to intelligent transportation systems

(2018) Energies, 11 (5), art. no. 1317.

DOI: 10.3390/en11051317

Di Persio, L., Cecchin, A., Cordoni, F.

Novel approaches to the energy load unbalance forecasting in the Italian electricity market

(2017) Journal of Mathematics in Industry, 7 (1), art. no. 5.

DOI: 10.1186/s13362-017-0035-y

Di Persio, L., Honchar, O.

Analysis of recurrent neural networks for short-term energy load forecasting

(2017) AIP Conference Proceedings, 1906, art. no. 190006.

DOI: 10.1063/1.5012469

Di Persio, L., Guida, F.

A discrete trinomial model for the birth and death of stock financial bubbles

(2017) AIP Conference Proceedings, 1906, art. no. 190007.

DOI: 10.1063/1.5012470

Collotta, M., Pau, G., Di Persio, L., De Marchis, M., Milici, B.

Preface of the Symposium "advanced Engineering Systems and Computer Applications: Theory and Practice"

(2017) AIP Conference Proceedings, 1906, art. no. 190001.

DOI: 10.1063/1.5012464

- Cordoni, F., Di Persio, L.
Stochastic reaction-diffusion equations on networks with dynamic time-delayed boundary conditions
(2017) *Journal of Mathematical Analysis and Applications*, 451 (1), pp. 583-603.
DOI: 10.1016/j.jmaa.2017.02.008
- Bonollo, M., Persio, L.D., Mammi, L., Olivad, I.
Estimating the Counterparty Risk Exposure by Using the Brownian Motion Local Time
(2017) *International Journal of Applied Mathematics and Computer Science*, 27 (2), pp. 435-447.
DOI: 10.1515/amcs-2017-0030
- Bezborodov, V., Di Persio, L.
Maximal irreducibility measure for spatial birth-and-death processes
(2017) *Statistics and Probability Letters*, 125, pp. 25-32.
DOI: 10.1016/j.spl.2017.01.019
- Cordoni, F., Di Persio, L., Oliva, I.
A nonlinear Kolmogorov equation for stochastic functional delay differential equations with jumps
(2017) *Nonlinear Differential Equations and Applications*, 24 (2), art. no. 16.
DOI: 10.1007/s00030-017-0440-3
- Cordoni, F., Di Persio, L.
Gaussian estimates on networks with dynamic stochastic boundary conditions
(2017) *Infinite Dimensional Analysis, Quantum Probability and Related Topics*, 20 (1), art. no. 1750001, .
DOI: 10.1142/S0219025717500011
- di Persio, L., Guida, F.
Stock financial bubbles: A trinomial trees based analysis
(2017) *International Journal of Circuits, Systems and Signal Processing*, 11, pp. 411-419.
- Benazzoli, C., Di Persio, L.
Optimal execution strategy in liquidity framework
(2017) *Cogent Economics and Finance*, 5 (1), art. no. 1364902.
DOI: 10.1080/23322039.2017.1364902
- Albeverio, S., Di Persio, L., Mastrogiacomo, E., Smii, B.
Invariant measures for sdes driven by lévy noise: A case study for dissipative nonlinear drift in infinite dimension
(2017) *Communications in Mathematical Sciences*, 15 (4), pp. 957-983.
DOI: 10.4310/CMS.2017.v15.n4.a3
- Albeverio, S., Persio, L.D., Mastrogiacomo, E., Smii, B.
A Class of Lévy Driven SDEs and their Explicit Invariant Measures
(2016) *Potential Analysis*, 45 (2), pp. 229-259.
DOI: 10.1007/s11118-016-9544-3
- Di Persio, L., Frigo, M.
Gibbs sampling approach to regime switching analysis of financial time series
(2016) *Journal of Computational and Applied Mathematics*, 300, pp. 43-55.
DOI: 10.1016/j.cam.2015.12.010
- Barbu, V., Cordoni, F., Di Persio, L.
Optimal control of stochastic FitzHugh-Nagumo equation
(2016) *International Journal of Control*, 89 (4), pp. 746-756.
DOI: 10.1080/00207179.2015.1096023

- Crescimanna, V., Di Persio, L.
Herd Behavior and Financial Crashes: An Interacting Particle System Approach
(2016) *Journal of Mathematics*, 2016, art. no. 7510567, .
DOI: 10.1155/2016/7510567
- Di Persio, L., Honchar, O.
Artificial neural networks architectures for stock price prediction: Comparisons and applications
(2016) *International Journal of Circuits, Systems and Signal Processing*, 10, pp. 403-413.
- Cordoni, F., Di Persio, L.
A bsde with delayed generator approach to pricing under counterparty risk and collateralization
(2016) *International Journal of Stochastic Analysis*, 2016, art. no. 1059303.
DOI: 10.1155/2016/1059303
- Benazzoli, C., Di Persio, L.
Default contagion in financial networks
(2016) *International Journal of Mathematics and Computers in Simulation*, 10, pp. 112-117.
- Di Persio, L., Bonollo, M., Prezioso, L.
Implicit trigger price determination for contingent convertible bond
(2016) *International Journal of Pure and Applied Mathematics*, 106 (3), pp. 769-789.
DOI: 10.12732/ijpam.v106i3.7
- Di Persio, L., Perin, I.
An ambit stochastic approach to pricing electricity forward contracts: The case of the German Energy Market
(2015) *Journal of Probability and Statistics*, 2015, art. no. 626020.
DOI: 10.1155/2015/626020
- Cordoni, F., Di Persio, L.
Invariant measure for the Vasicek interest rate model in the Heath-Jarrow-Morton-Musiela framework
(2015) *Infinite Dimensional Analysis, Quantum Probability and Related Topics*, 18 (3), art. no. 1550022, .
DOI: 10.1142/S0219025715500228
- Di Persio, L., Oliva, I.
An interval of no-arbitrage prices for American contingent claims in incomplete markets
(2015) *International Journal of Pure and Applied Mathematics*, 103 (1), pp. 133-153.
DOI: 10.12732/ijpam.v103i1.11
- Di Persio, L., Frigo, M.
Maximum likelihood approach to markov switching models
(2015) *WSEAS Transactions on Business and Economics*, 12, pp. 239-242.
- Cordoni, F., Di Persio, L.
Small noise asymptotic expansion for a infinite dimensional stochastic reaction-diffusion forced van der pol equation
(2015) *International Journal of Mathematical Models and Methods in Applied Sciences*, 9, pp. 202-210.

- Cordoni, F., Di Persio, L.
Small noise expansion for the Lévy perturbed Vasicek model
(2015) *International Journal of Pure and Applied Mathematics*, 98 (2), pp. 291-301.
DOI: 10.12732/ijpam.v98i2.10
- Di Persio, L., Pellegrini, G., Bonollo, M.
Polynomial chaos expansion approach to interest rate models
(2015) *Journal of Probability and Statistics*, 2015, art. no. 369053.
DOI: 10.1155/2015/369053
- Cordoni, F., Di Persio, L.
Backward stochastic differential equations approach to hedging, option pricing, and insurance problems
(2014) *International Journal of Stochastic Analysis*, 2014, art. no. 152389.
DOI: 10.1155/2014/152389
- Di Persio, L., Vettori, S.
Markov Switching Model Analysis of Implied Volatility for Market Indexes with Applications to S&P 500 and DAX
(2014) *Journal of Mathematics*, 2014, art. no. 753852.
DOI: 10.1155/2014/753852
- Cordoni, F., Di Persio, L.
First order correction for the characteristic function of a multidimensional and multiscale stochastic volatility model
(2014) *International Journal of Pure and Applied Mathematics*, 93 (5), pp. 741-752.
DOI: 10.12732/ijpam.v93i5.12
- Cordon, F., Di Persio, L.
Transition density for cir process by lie symmetries and application to zcb pricing
(2013) *International Journal of Pure and Applied Mathematics*, 88 (2), pp. 239-246.
DOI: 10.12732/ijpam.v88i2.7
- Marinelli, C., Di Persio, L., Ziglio, G.
Approximation and convergence of solutions to semilinear stochastic evolution equations with jumps
(2013) *Journal of Functional Analysis*, 264 (12), pp. 2784-2816.
DOI: 10.1016/j.jfa.2013.02.020
- Albeverio, S., Di Persio, L., Mastrogiacomo, E.
Small noise asymptotic expansions for stochastic PDE's, I. the case of a dissipative polynomially bounded nonlinearity
(2011) *Tohoku Mathematical Journal*, 63 (4), pp. 877-898.
DOI: 10.2748/tmj/1325886292
- Di Persio, L., Ziglio, G.
Gaussian estimates on networks with applications to optimal control
(2011) *Networks and Heterogeneous Media*, 6 (2), pp. 279-296.
DOI: 10.3934/nhm.2011.6.279
- Di Persio, L.
Anomalous Behaviour of the correction to the Central Limit Theorem for a model of Random Walk in Random Media
(2010) *Bolletino dell'Unione Matematica Italiana*, 3 (1), pp. 179-206.

Albeverio, S., Cattaneo, L., Mazzucchi, S., Di Persio, L.
 A rigorous approach to the Feynman-Vernon influence functional and its applications. I
 (2007) Journal of Mathematical Physics, 48 (10), art. no. 102109.
 DOI: 10.1063/1.2799881

Albeverio, S., Cattaneo, L., Di Persio, L.
 Local invariants for a finite multipartite quantum system
 (2007) Reports on Mathematical Physics, 60 (2), pp. 167-174.
 DOI: 10.1016/S0034-4877(07)00023-7

A complete list of my (not only Scopus indexed) publications can be retrieved from here:

<https://scholar.google.it/citations?user=bNK8oa4AAAAJ&hl=en>

Metrics:

	All time	Since 2015
Citations	619	588
h-index	14	14
i10-index	21	18

Proceedings and Chapters

1. Di Persio, L. , Collotta, M., De Marchis, M., Messineo, A., Pau, G., Preface of the symposium "advanced Engineering Systems and Computer Applications: Theory and Practice" (2018) AIP Conference Proceedings, 2040, art. no. 140001
2. Di Persio L., Guida Francesco, *A discrete trinomial model for the Birth and Death of stock financial bubbles*, proceeding for ICCMSE 13th International Conference of Computational Methods in Sciences and Engineering, 2017
3. Di Persio L., Honchar Oleksandr, *Analysis of Recurrent Neural Networks for short-term Energy load forecasting*, proceeding for ICCMSE 13th International Conference of Computational Methods in Sciences and Engineering, 2017
4. Di Persio L., Benazzoli Chiara, *Optimal execution strategy in liquidity framework under exponential temporary market impact*, Chapter in Handbook of Recent Advances in Commodity and Financial Modeling, Springer, 2017
5. Di Persio L., Honchar Oleksandr, *Bayesian convolutional networks for energy load forecasting*, Chapter in "Handbook of Energy Finance: Theories, Practices and Simulations", to be published by World Scientific Publishing in April-May 2018.
6. Di Persio L., Prezioso Luca, *Affine type analysis for BESQ and CIR processes with applications to Mathematical Finance*, Springer Book, 2018
7. Di Persio L., Nicola Gugole, *Explicit computation of the post-crisis spot LIBOR in a jump-diffusion framework*, to be published in New Methods in fixed Income Modeling-Springer Book, 2018

Submitted papers

1. Di Persio L., Bezborodov Viktor, *The quenched central limit theorem for a model of random walk in random environment*, to be published by Methods of Functional Analysis and Topology (2019/20)
2. Di Persio L., Albeverio Sergio, Cordini Francesco, *Asymptotic expansion for some local volatility models arising in finance*, submitted to Decisions in Economics and Finance, special issue on "Quantitative developments in financial volatility - theory and practice", 2018 (accepted with minor changes)
3. Di Persio L., *Dynamic convex risk measures from discrete to continuous time: a convergence approach by g-expectations in presence of Lévy noise*, accepted with minor changes by Infinite Dimensional Analysis and Quantum Probability, 2018

Under my responsibility, I declare to be in possession of the qualifications indicated in this curriculum and I also declare the truth of what is written therein.

27th of October, 2020

Luca Di Persio

