PERSONAL INFORMATION

Chiara Corsato

📍 Department of Economics, Business, Mathematics and Statistics, University of Trieste - Via Tigor, 22, 34124, Trieste (Italy)

✉ ccorsato@units.it

Date of birth May 30, 1986

CURRENT POSITION

November 10, 2017 – present

Post-doc researcher

Research field: *Quantitative Analysis and Assessment of Risks in Finance and Insurance*
Department of Economics, Business, Mathematics and Statistics, University of Trieste
Advisor: Prof. Paolo Vicig

PAST POSITIONS

November 10, 2015 – November 9, 2017

Post-doc researcher

Research field: *Quantitative Analysis and Assessment of Risks in Finance and Insurance*
Department of Economics, Business, Mathematics and Statistics, University of Trieste
Advisor: Prof. Anna Rita Bacinello

QUALIFICATIONS

April 28, 2015

Ph.D. title in Mathematical Analysis

School of Doctorate in Environmental and Industrial Fluid Mechanics, University of Trieste

Qualification awarded cum laude
Title of the thesis: *Mathematical analysis of some differential models involving the Euclidean or the Minkowski mean curvature operator*
Advisor: Prof. Pierpaolo Omari

July 16, 2013

Qualification for teaching Mathematics and Science at scuola secondaria di primo grado

Tirocinio Formativo Attivo, University of Trieste
Final mark: 99/100

October 20, 2010

Master degree in Mathematics

University of Udine

Graduation mark: 110/110 cum laude
Title of the thesis: *Problemi ai limiti per equazioni differenziali fortemente non lineari*
Advisor: Prof. Fabio Zanolin

July 16, 2008

Bachelor degree in Mathematics

University of Udine

Graduation mark: 110/110 cum laude
Title of the thesis: *Il problema isoperimetrico del cerchio e argomenti connessi*
Advisor: Prof. Fabio Zanolin

July 21, 2005	**Scientific high school degree**
	Liceo Scientifico E. Torricelli, Maniago (Pordenone)
	Graduation mark: 100/100

PUBLICATIONS

1. C. Corsato, R. Pelessoni, P. Vicig, *Generalising the Pari-Mutuel Model*. In: S. Destercke, T. Denoeux, M.A. Gil, P. Grzegorzewski, O. Hryniewicz, Uncertainty Modelling in Data Science (to appear)

2. C. Corsato, C. De Coster, F. Obersnel, P. Omari, A. Soranzo, *A prescribed anisotropic mean curvature equation modeling the corneal shape: a paradigm of nonlinear analysis*, Discrete Contin. Dyn. Syst. Ser. S 11 2018), no. 2, 213–256

3. C. Corsato, R. Pelessoni, P. Vicig, *Weak Dutch Books versus Strict Consistency with Lower Previsions*. In: Proceedings of the Tenth International Symposium on Imprecise Probability: Theories and Applications (ISIPTA '17). Proc. Mach. Learn. Res. 62 (2017), 85–96

4. C. Corsato, R. Pelessoni, P. Vicig, *Weak Dutch Books with Imprecise Previsions*, Int. J. Approx. Reason. 88 (2017), 72–90

5. C. Corsato, F. Obersnel, P. Omari, *The Dirichlet problem for gradient dependent prescribed mean curvature equations in the Lorentz-Minkowski space*, Georgian Math. J. 24 (2017), 113–134

6. C. Corsato, P. Omari, F. Zanolin, *Subharmonic solutions of the prescribed curvature equation*, Commun. Contemp. Math. 18 (2016) 1550042 (33 pages)

7. C. Corsato, C. De Coster, P. Omari, *The Dirichlet problem for a prescribed anisotropic mean curvature equation: existence, uniqueness and regularity of solutions*, J. Differ. Equations 260 (2016), 4572–4618

8. C. Corsato, C. De Coster, P. Omari, *Radially symmetric solutions of an anisotropic mean curvature equation modeling the corneal shape*. In: Discrete Contin. Dyn. Syst. 2015, Dynamical systems, differential equations and applications. 10th AIMS Conference. Suppl. (2015), 297–303

9. I. Coelho, C. Corsato, S. Rivetti, *Positive radial solutions of the Dirichlet problem for the Minkowski-curvature equation in a ball*, Topol. Methods Nonlinear Anal. 44 (2014), 23–39

10. I. Coelho, C. Corsato, P. Omari, *A one-dimensional prescribed curvature equation modeling the corneal shape*, Bound. Value Probl. 2014, 2014:127. Available at: http://www.boundaryvalueproblems.com/content/2014/1/127

11. C. Corsato, F. Obersnel, P. Omari, S. Rivetti, *On the lower and upper solution method for the prescribed mean curvature equation in Minkowski space*, Discrete Contin. Dyn. Syst. (2013), Supplement 2013 (2013), 159–169

12. C. Corsato, F. Obersnel, P. Omari, S. Rivetti, *Positive solutions of the Dirichlet problem for the prescribed mean curvature equation in Minkowski space*, J. Math. Anal. Appl. 405 (2013), no. 1, 227–239

13. I. Coelho, C. Corsato, F. Obersnel, P. Omari, *Positive solutions of the Dirichlet problem for the one-dimensional Minkowski-curvature equation*, Adv. Nonlinear Stud. 12 (2012), 621–638

CONTRIBUTIONS GIVEN AT CONFERENCES

September 27 – 29, 2018 (planned)	Invited talk, GEDO, Giornate di Equazioni Differenziali Ordinarie: metodi e prospettive, Marche Polytechnic University, Ancona
September 17 – 21, 2018 (planned)	*Generalising the Pari-Mutuel Model*, SMPS 2018/BELIEF 2018, Soft Methods in Probability and Statistics/Theory of Belief functions, University of Technology of Compiègne (France)

September 9 – 11, 2018 (planned)	*On the optimal design of participating life insurance contracts*, EAJ 2018, European Actuarial Journal Conference, Catholic University of Leuven (Belgium)
September 14 – 16, 2017	*Weak Dutch Books with imprecise previsions*, 41st AMASES Meeting, Association for Mathematics applied to Economics and Social Sciences, University of Cagliari
July 10 – 14, 2017	*Weak Dutch Books versus strict consistency with lower previsions*, ISIPTA '17 - ECSQARU 2017, International Symposium on Imprecise Probability: Theories and Applications - European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty, University of Italian Switzerland, Lugano (Switzerland)
January 23 – 25, 2017	Invited talk *Subharmonic solutions of the prescribed curvature equation*, Nonlinear Meeting in Udine 2017, University of Udine
February 4, 2016	*On the Dirichlet problem for a prescribed anisotropic mean curvature equation*, Workshop BVP in FVG, SISSA, Trieste
May 14, 2015	*How to describe the geometry of the cornea?*, Joint UNITS - SISSA workshop on Applied Math in Fluid Mechanics, SISSA, Trieste
July 7 – 11, 2014	*Subharmonic solutions of the prescribed curvature equation*, 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Autonomous University of Madrid (Spain)
May 28 – 31, 2012	*Positive solutions of the Minkowski-curvature equation*, Spring School in Nonlinear Partial Differential Equations, Free University of Brussels (Belgium)

SEMINARS DELIVERED

November 20, 2017	Invited seminar *Weak Dutch Books: the lose-or-draw case with imprecise previsions*, University of Milano - Bicocca
April 6, 2017	*Weak Dutch Books with imprecise previsions*, University of Trieste
April 16, 2015	*Analisi di alcuni modelli basati sull'operatore di curvatura media*, University of Trieste
November 20, 2014	*On the Dirichlet problem for a prescribed anisotropic mean curvature equation*, University of Valenciennes and Hainaut - Cambrésis (France)
November 12, 2014	*On some mathematical models involving the mean curvature operator in Euclidean or Minkowski space*, on the occasion of the annual open ceremony of the Doctoral School in Earth Science and Fluid Mechanics, ICTP, Trieste
July 10, 2014	*Un'equazione della curvatura anisotropa che modellizza la geometria della cornea*, University of Udine
January 10, 2014	*Capillarity-type equations*, on the occasion of the annual open ceremony of the Doctoral School in Earth Science and Fluid Mechanics, ICTP, Trieste
December 3, 2013	*The mean curvature equation in Minkowski or Euclidean spaces, with applications*, University of Trieste
November 14, 2013	*Solvability of a prescribed curvature equation describing the corneal shape*, University of Valenciennes and Hainaut - Cambrésis (France)
November 13, 2011	*Positive solutions of the curvature equation in Minkowski space*, University of Trieste

POSTERS PRESENTED

September 17 – 21, 2018 (planned)	*Generalising the Pari-Mutuel Model*, SMPS 2018/BELIEF 2018, Soft Methods in Probability and Statistics/Theory of Belief functions, University of Technology of Compiègne (France)
July 10 – 14, 2017	*Weak Dutch Books versus strict consistency with lower previsions*, ISIPTA '17 - ECSQARU 2017, International Symposium on Imprecise Probability: Theories and Applications - European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty, University of Italian Switzerland, Lugano (Switzerland)

November 26, 2013	Invited poster *Subharmonic solutions of the prescribed curvature equation*, National Academy of Lincei, Rome
October 28 – 31, 2013	*Subharmonic solutions of the prescribed curvature equation*, Nord Pas de Calais/Belgium congress of mathematics, University of Valenciennes and Hainaut - Cambrésis (France), University of Mons (Belgium)

VISITING PERIODS

November 20 – 21, 2017	Department of Statistics and Quantitative Methods, University of Milano - Bicocca
September 1 – December 5, 2014	LAMAV, Laboratoire de Mathématiques et leurs Applications, University of Valenciennes and Hainaut - Cambrésis (France), in the frame of the program Doctor Europaeus
October 28 – November 17, 2013	LAMAV, Laboratoire de Mathématiques et leurs Applications, University of Valenciennes and Hainaut - Cambrésis (France)

INTERNATIONAL ACADEMIC TRAINING

September 2009 – January 2010	Erasmus student at Pierre and Marie Curie University, Paris VI (France)

CONFERENCES OR SCHOOLS ATTENDED

June 5 – 9, 2017	ICDDEA 2017, International Conference on Differential & Difference Equations and Applications, Military Academy, Amadora (Portugal)
January 26 – 27, 2017	Workshop on Quantitative Finance, University of Milano - Bicocca
September 12 – 14, 2016	SMPS 2016, Soft Methods in Probability and Statistics, University La Sapienza, Rome
October 10, 2014	Journée du Laboratoire Painlevé et de la Fédération (Fédération de Recherche Mathématique du Nord-Pas de Calais), University of Lille 1 (France)
October 6 – 7, 2014	Neuvièmes Journées EDP, Lille - Littoral - Valenciennes, Université de Lille 1 (France)
May 28 – 30, 2014	NPDE 2014, Recent Trends in Nonlinear Partial Differential Equations and Applications, University of Trieste
October 28 – 31, 2013	Nord Pas de Calais/Belgium congress of mathematics, University of Valenciennes and Hainaut - Cambrésis (France), University of Mons (Belgium)
January 30 – February 1, 2013	QTNDE 2013, Qualitative Theory of Nonlinear Differential Equations, University of Trieste
May 30 – June 6, 2012	Spring School in Nonlinear Partial Differential Equations, Free University of Brussels (Belgium)
June 20 – 25, 2011	School on Stability and Bifurcation for Nonautonomous Differential Equations, International Mathematical Summer Center, Cetraro (Cosenza)

MEMBERSHIPS OF PROFESSIONAL ORGANISATIONS AND PARTICIPATION TO SCIENTIFIC PROJECTS

2018	Participation to funded INdAM-GNAMPA project *Proprietà qualitative di alcuni problemi ai limiti* (P.I. A. Fonda, University of Trieste)
2017	Participation to funded INdAM-GNAMPA project *Equazioni fortemente nonlineari: esistenza, molteplicità, regolarità di soluzioni* (P.I. P. Omari, University of Trieste) Membership of AMASES, Association for Mathematics Applied to Economics and Social Sciences

2016	Participation to funded INdAM-GNAMPA project *Problemi differenziali non lineari: esistenza, molteplicità e proprietà qualitative delle soluzioni* (P.I. M. Garrione, Polytechnic University of Milan)
2016 – present	Membership of INdAM-GNAMPA, Istituto Nazionale per l'Alta Matematica *F. Severi*-Gruppo Nazionale per l'Analisi Matematica, la Probabilità e le loro Applicazioni
2012	Participation to funded INdAM-GNAMPA project *Problemi al contorno per equazioni differenziali non lineari* (P.I. F. Obersnel, University of Trieste)
2012 – 2014	Membership of INdAM-GNAMPA, Istituto Nazionale per l'Alta Matematica *F. Severi*-Gruppo Nazionale per l'Analisi Matematica, la Probabilità e le loro Applicazioni

ADDITIONAL ACADEMIC ROLES

March 2017 – present	Delegate of Post-doc researchers, Department of Economics, Business, Mathematics and Statistics, University of Trieste

REFEREE ACTIVITY

June 2017 – present	Referee activity for *Monatshefte für Mathematik*, *Discrete and Continuous Dynamical Systems*, *Journal of the London Mathematical Society*

ACADEMIC TEACHING ACTIVITY

Awarding of Ph.D. courses

March 14 – April 18, 2018	*Nonlinear analysis applied to a capillarity-type model* (tacet), Doctoral School in Earth Science, Fluid-Dynamics, and Mathematics. Interactions and Methods, University of Trieste

Degree courses

2017 – 2018	Teaching Assistant of the English course *Mathematics* (35 hours), Bachelor degree in Economics, University of Trieste Tutor of the course *Matematica per l'Economia e la Statistica 1* (10 hours), Bachelor degree in Statistics, University of Trieste Teaching Assistant of the course *Matematica* (15 hours), Bachelor degree in Food Science and Technology, University of Udine
2016 – 2017	Teaching Assistant of the English course *Mathematics*: part of the introductory course (7 hours) and exercise classes (30 hours), Bachelor degree in Economics, University of Trieste Tutor of the course *Matematica per l'Economia e la Statistica 1* (10 hours), Bachelor degree in Statistics, University of Trieste Teaching Assistant of the course *Matematica* (15 hours), Bachelor degree in Food Science and Technology, University of Udine
2015 – 2016	Teaching Assistant of the English course *Mathematics* (30 hours), Bachelor degree in Economics, University of Trieste Tutor of the course *Matematica per l'Economia e la Statistica 1* (10 hours), Bachelor degree in Statistics, University of Trieste Teaching Assistant of the course *Matematica* (15 hours), Bachelor degree in Food Science and Technology, University of Udine

SCHOLASTIC TEACHING ACTIVITY

September 14 – October 30, 2015	Teacher of *Matematica e Scienze*, scuola secondaria di primo grado G.F. da Tolmezzo, Istituto Comprensivo di Tolmezzo (Udine)
April 30 – June 30, 2015	Teacher of *Matematica e Scienze*, scuola secondaria di primo grado E. Fermi, Istituto Comprensivo IV, Udine
February 20 – March 20, 2015	Special needs teacher, scuola secondaria di primo grado G. Marchetti, Istituto Comprensivo di Pozzuolo del Friuli, Campoformido (Udine)

Italian: mother tongue

English: fluent

French: fluent