



Personal information

Surname(s) / First name(s)

Email(s)

Occupational field

Education and training

October 2016 – September 2018

FERRARI Simone

simone.ferrari@unisalento.it

Functional analysis, infinite dimensional analysis, convex analysis, measure theory, elliptic and parabolic partial differential equations.

Post doc student in Mathematics

Università del Salento (Lecce, ITALY)

Winner of the Post Doc “Equazioni ellittiche e paraboliche con coefficienti illimitati” (“Elliptic and parabolic equations with unbounded coefficients”), SSD MAT/05 “Analisi Matematica” of Università del Salento.

April 2014 – March 2016

Post doc student in Mathematics

Università degli studi di Parma (Parma, ITALY)

Winner of the Post Doc “Tecniche per equazioni di Kolmogorov in dimensione finita e infinita, e problemi connessi” (“Techniques for Kolmogorov equations in finite and infinite dimension, and related problems”), SSD MAT/05 “Analisi Matematica” of Università degli studi di Parma.

January 2010 – July 2013

Ph. D. student in Mathematics

Università degli studi di Milano (Milano, ITALY). Thesis defence 02-07-2013

Thesis title: “Localization techniques for renormings”

Advisor: Prof. José Orihuela (Universidad de Murcia)

Coadvisor: Prof. Matias Raja (Universidad de Murcia)

Winner of a Scholarship by the Università degli studi di Milano.

September 2007 – July 2009

MS in Mathematics

Università degli studi di Milano (Milano, ITALY). Thesis defence 21-07-2009

Thesis title: “Riflessività e spazi universali” (“Reflexivity and universal spaces”)

Advisor: Prof. Clemente Zanco (Università degli studi di Milano)

September 2004 – July 2007

BS in Mathematics

Università degli studi di Milano (Milano, ITALY). Thesis defence 18-07-2007

Thesis title: “Aspetti geometrici dei sistemi di disuguaglianze lineari” (“Geometrical aspects of systems of linear inequalities”)

Advisor: Prof. Clemente Zanco (Università degli studi di Milano)

Invited conferences and talks

7 September 2018

Invited speaker at Bicocca University, Milan (ITALY).

Talk: “*Gradient estimates for perturbed Ornstein–Uhlenbeck semigroups on infinite dimensional convex domains*”.

27 August 2017 – 2 September 2017

Invited to attend the Workshop: “Workshop/School on Stochastic PDEs, Mean Field Games and Biology”, Gran Sasso Science Institute, L’Aquila (ITALY).

27 April 2016

Invited speaker in the cycle of seminars: “Seminari di Analisi Astratta”, Milan (ITALY).

Talk: “*An introduction to Gaussian measure in Banach spaces*”.

25 November 2014

Invited speaker in the cycle of seminars: “Seminario Rey Pastor”, Murcia (SPAIN).

Talk: “*Weakly metrizable spheres and renorming*”.

21 March 2013

Invited speaker in the cycle of seminars: “Seminari di Analisi Astratta”, Milan (ITALY).

Talk: “*Strictly convex renorming: a characterization*”.

21 February 2013

Invited speaker in the cycle of seminars: “Seminario Rey Pastor”, Murcia (SPAIN).

Talk: “*Localization techniques for renorming*”.

Conferences and talks

- 18 June 2018 – 19 June 2017
Attending the workshop “Equazioni di evoluzioni: risultati recenti e prospettive”, Lecce (ITALY).
Talk: “*Gradient estimates on infinite dimensional convex domains and their consequences*”.
- 4 September 2017 – 6 September 2017
Attending the workshop “Deterministic and stochastic evolution equations”, Parma (ITALY).
Talk: “*On the domain of elliptic operators in subsets of Wiener spaces endowed with a weighted Gaussian measure*”.
- 22 May 2017 – 26 May 2017
Attending the conference “Partial Differential Equations and Applications”, Bologna (ITALY).
Talk: “*On the domain of elliptic operators in subsets of Wiener spaces endowed with a weighted Gaussian measure*”.
- 4 October 2016 – 7 October 2016
Attending the conference “Lecce Conference in Calculus of Variations and Partial Differential Equation”, Lecce (ITALY).
- 9 June 2016 – 10 June 2016
Attending the workshop “IV Workshop in Functional Analysis”, Cartagena (SPAIN).
Talk: “*Generalized metric spaces and renorming of Banach spaces*”.
Poster: “*Sobolev regularity for solutions of elliptic equations in infinite dimensional Banach spaces endowed with a weighted Gaussian measure*”.
- 29 May 2016 – 3 June 2016
Attending the workshop “Final Workshop of the 19th Internet Seminar”, Casalmaggiore (ITALY).
Talk: “*H-Lipschitz functions*”.
- 14 December 2015 – 18 December 2015
Attending the conference “Sixth Trilateral Meeting on Nonlinear Partial Differential Equations and Applications”, Parma (Italy).
- 19 July 2015 – 24 July 2015
Attending the school “*Operator Semigroups for Dynamical Systems: Positivity, Perturbation, Networks*”, Wuppertal (GERMANY).
- 6 July 2015 – 10 July 2015
Attending the workshop “New advances in PDE’s, Inverse Problems and Control Theory”, Parma (ITALY).
Talk: “*Sobolev spaces with respect to weighted Gaussian measures in infinite dimensions*”.
- 20 October 2014 – 24 October 2014
Attending the school “Autumn School on Non-Linear Geometry of Banach Spaces and Applications”, Métabief (FRANCE).
- 17 September 2014 – 19 September 2014
Attending the workshop “Miniworkshop GIAF 2014”, Milan (ITALY).
Talk: “*Kadec property and Stone metrization theorem*”.
- 17 September 2013 – 19 September 2013
Attending the workshop “Incontro GIAF”, Genoa (ITALY).
Talk: “*Strictly convex renormings and covering of the unit sphere*”.
- 21 January 2013 – 25 January 2013
Attending the conference “Congreso bienal de la Real Sociedad Matemática Española 2013”, Santiago de Compostela (SPAIN).
Talk: “*Characterizing and transferring rotund norms*”.
- 15 November 2012 – 16 November 2012
Attending the conference “XI Encuentro de Análisis Funcional Alicante – Murcia – Valencia”, Alicante (SPAIN).
Talk: “*Characterizations of rotund renormings using symmetric*”.
- 28 August 2012 – 1 September 2012
Attending the conference “Integration, Vector measures and Related Topics V”, Palermo (ITALY).
Talk: “*A topological property equivalent to the existence of a dual rotund renorming*”.
- 25 June 2012 – 30 June 2012
Attending the workshop “IVth Workshop on Coverings, Selections, and Games in Topology”, Caserta (ITALY).
Talk: “*Metrization theory and the Kadec property*”.
- 19 April 2012 – 21 April 2012
Attending the Conference “VIII Encuentro de la Red de Análisis Funcional”, La Manga del Mar Menor (SPAIN).
Poster: “*Metrization theory and the Kadec property*”.
- 17 November 2011 – 18 November 2011
Attending the conference “IX Encuentro de Análisis Funcional Murcia – Valencia”, Cartagena (SPAIN).
- 2 March 2011 – 5 March 2011
Attending the conference “Integration, Vector measures and Related Topics IV”, Murcia (SPAIN).
- 16 January 2010 – 23 January 2010
Attending the school “*38th Winter school in abstract analysis*”, Klenci pod Čerchovem (CZECH REPUBLIC).
- 28 July 2008 – 29 August 2008
Attending the school “*Interuniversity Mathematics Summer School*”, Perugia (ITALY) organized by INDAM (Istituto nazionale di alta matematica). Courses: Probability (Grade B) and Functional Analysis (Grade A)

Abroad experiences

20 November 2017 – 24 November 2017
 20 November 2014 – 27 November 2014
 4 September 2012 – 26 February 2013
 2 October 2011 – 23 June 2012
 7 January 2011 – 31 March 2011

Invited professor at the University of Murcia (SPAIN).

Invited professor at the University of Murcia (SPAIN).

Visiting student at the University of Murcia (SPAIN) (Prof. José Orihuela).

Visiting student at the University of Murcia (SPAIN) (Prof. José Orihuela).

Visiting student at the University of Murcia (SPAIN) (Prof. José Orihuela).

Teaching experiences

Academic year 2018/19
 Academic year 2018/19
 September 2018
 Academic year 2017/18
 Academic year 2016/17
 October 2015 – December 2015
 Academic year 2014/15 and 2015/16
 Academic year 2013/14
 Academic year 2013/14
 Academic year 2013/14
 Academic year 2012/13

Teacher to the course “Elementi di Matematica” for the Bachelor in Engineering of the Industrial Technologies of the Università del Salento.

Teacher to the course “Analisi Matematica e Geometria I” for the Bachelor in Industrial Engineering of the Università del Salento.

Teacher to the precourse “Analisi Matematica” for all the Bachelors in Engineering of the Università del Salento.

Teacher to the course “Analisi Matematica e Geometria I” for the Bachelor in Industrial Engineering of the Università del Salento.

Teaching assistant to the course “Istituzioni di Matematica” for the Bachelor in Science and Technology for the environment of the Università del Salento.

Gives a Microcourse with the title “Ten Talks about infinite dimensional Geometry and Topology of Banach spaces”, Parma (ITALY).

Tutor to the course “Analisi matematica I” and “Geometria I” for all the Bachelors in Engineering of the Università degli studi di Parma.

Teaching assistant to the course “Geometria I” for the Bachelor in Physics of the Università degli studi di Milano.

Tutor to the course “Analisi matematica III” for the Bachelor in Physics of the Università degli studi di Milano.

Tutor to the course “Matematica generale” for the Bachelor in Biology of the Università degli studi di Milano.

Tutor to the course “Geometria I” for the Bachelor in Physics of the Università degli studi di Milano.

Personal skills and competences

Computer skills and competences

LaTeX (Advanced), C, Matlab, Maple (Intermediate)

Mother tongue(s)

Other language(s)

Self-assessment
 European level^(*)

English

Spanish

French

Italian

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user
A2	Basic user	A2	Basic user	A2	Basic user	A2	Basic user	A2	Basic user

^(*) Common European Framework of Reference (CEF) level

Other research informations

23 March 2018 - 22 March 2019

Member of the 2018 G.N.A.M.P.A. project “Equazioni e sistemi di equazioni ellittiche e paraboliche a coefficienti illimitati” (Elliptic and parabolic equations and systems of equations with unbounded coefficients) funded by INdAM.

13 September 2017 - 28 February
2018

1 March 2017 - 12 September 2017

Coordinator of the 2017 G.N.A.M.P.A. project “Equazioni e sistemi di equazioni di Kolmogorov in dimensione finita e non” (Equations and systems of Kolmogorov equations in finite and infinite dimension) funded by INdAM.

Member of the 2017 G.N.A.M.P.A. project “Equazioni e sistemi di equazioni di Kolmogorov in dimensione finita e non” (Equations and systems of Kolmogorov equations in finite and infinite dimension) funded by INdAM.

Publications

- 1) S. Ferrari, L. Oncina, J. Orihuela, and M. Raja. Metrization theory and the Kadec property. *Banach J. Math. Anal.*, 10(2):281–306, 2016.
- 2) S. Ferrari, J. Orihuela, and M. Raja. Weakly metrizable spheres and renormings of Banach spaces. *Q. J. Math.*, 67(1):15–27, 2016.
- 3) G. Cappa and S. Ferrari. Maximal sobolev regularity for solutions of elliptic equations in infinite dimensional Banach spaces endowed with a weighted Gaussian measure. *J. Differential Equations* 261(12):7099–7131, 2016.
- 4) G. Cappa, S. Ferrari, Maximal Sobolev regularity for solutions of elliptic equations in Banach spaces endowed with a weighted Gaussian measure: The convex subset case, *J. Math. Anal. Appl.* 458(1):300–331, 2018.
- 5) S. Ferrari. Sobolev spaces with respect to a weighted Gaussian measures in infinite dimensions. Submitted. *ArXiv e-prints*, 2016. <http://arxiv.org/abs/1510.08283>.
- 6) S. Ferrari, J. Orihuela and M. Raja. Generalized metric properties of spheres and renormings of normed spaces. Submitted. *ArXiv e-prints*, 2016. <http://arxiv.org/abs/1605.08175>.
- 7) D. Addona, G. Cappa and S. Ferrari. On the domain of elliptic operators defined in subsets of Wiener spaces. Submitted. *ArXiv e-prints*, 2017. <https://arxiv.org/abs/1706.05260>.
- 8) L. Angiuli, S. Ferrari and D. Pallara. Gradient estimates for perturbed Ornstein–Uhlenbeck semigroups on infinite dimensional convex domains. Submitted. *ArXiv e-prints*, 2018. <https://arxiv.org/abs/1807.07780>.

Lecce, 21/09/2018

Simone Ferrari