



## Personal information

Surname(s) / First name(s)

Address(es)

Telephone(s)

Email(s)

Nationality(-ies)

Date of birth

Gender

## CAPPA Gianluca

Via San Fiorenzo, 19, 12084 Mondovì (CN), ITALY

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gianluca.cappa@nemo.unipr.it

Italian

15/06/1988

Male

## Occupational field

**Infinite dimensional analysis, Elliptic and parabolic partial differential equations, with eventually unbounded coefficients. In particular study of differential equations involving the Ornstein-Uhlenbeck operator on convex domains of separable Banach spaces**

## Education and training

January 2013 – December 2015

Ph. D. student in Mathematics

Università degli studi di Parma (PR, ITALY)

Thesis title: "Ornstein-Uhlenbeck operator in convex domains of Banach spaces"

Advisor: Prof. Alessandra Lunardi (Università degli studi di Parma)

September 2010 – July 2012

MS in Mathematics

Università degli studi di Torino (Torino, ITALY)

Thesis title: "L'equazione di Hénon: risultati recenti" ("The Hénon equation: recent results")

Advisor: Prof. Marino Badiale (Università degli studi di Torino)

September 2007 – July 2010

BS in Mathematics

Università degli studi di Torino (Torino, ITALY)

Thesis title: "Teoria generale delle equazioni differenziali singolari ed applicazione allo studio dell'equazione di Bessel" ("General theory of singular differential equations and application to the study of Bessel's equation")

Advisor: Prof. Walter Dambrosio (Università degli studi di Torino)

## Conferences and talks

4 July 2016 – 12 July 2016

66th Workshop "Advances in Convex Analysis and Optimization", Erice (ITALY).

Talk: "Maximal  $L^2$  regularity for Ornstein-Uhlenbeck equation in convex sets of Banach spaces endowed with weighted Gaussian measure".

29 May 2016 – 3 June 2016

Attending the workshop "Final Workshop of the 19<sup>th</sup> Internet Seminar", Casalmaggiore (ITALY).

Talk: "Sobolev Spaces on Infinite Dimensional Domains".

11 May 2016

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

Talk: "Esempi di misure gaussiane, differenziabilità e spazi di Sobolev in dimensione infinita".

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: "On the Ornstein-Uhlenbeck operator in convex domain of Banach spaces".

11 September 2014 -12 September 2014  
 20 January 2014 – 24 January 2014  
 28 July 2013 – 31 August 2013  
 8 July 2013 – 12 July 2013

**Teaching experiences**

9 June 2016  
 21 January 2016 – 06 June 2016  
 September 2015 – December 2015  
 10 March 2015 – 05 June 2015  
 September 2014 – June 2015  
 September 2011 – June 2012  
 September 2011 – June 2012

Attending the workshop “*Topics in Elliptic and Parabolic PDEs*”, Napoli (ITALY).  
 Attending the school “*School on nonlinear elliptic problems*”, January 20-24 2014, Università di Milano Bicocca (ITALY).  
 Attending the school “*Interuniversity Mathematics Summer School*”, Perugia (ITALY).  
 Attending the school “*Vector Value Partial Differential Equations and Applications*”, Cetraro (ITALY).

Teaching of Mathematics within the project “Verso l'Esame di Stato” at the Convitto Nazionale “M. Luigia” Parma  
 Professor of Mathematics and Physics at the Convitto Nazionale “M. Luigia” Parma  
 Teaching assistant to the course “Analisi matematica I” and “Analisi matematica II” for the Bachelor in Mathematic of the Università degli studi di Parma (Prof. Belloni, Panizzi, Celada).  
 Professor of Mathematics at the Istituto Superiore IS “Pietro Giordani” Parma  
 Tutor to the course “Analisi matematica II” for the Bachelor in Mathematic of the Università degli studi di Parma (Prof. Celada and Prof. Lorenzi).  
 Winner of two grants (art.13) for teaching collaboration, University of Turin; I made support to teaching of Calculus (1 and 2) (exercises and marking) for the first year of Bachelor Degree in Physics (Prof. Priola and Oliaro) and Biology (Prof. Yashima).  
 Winner of a grant (art.13) for working collaboration, University of Turin; activity done: collaboration in the Press Center of the Department of Mathematics. My main duties were bureau activities, in particular to arrange lessons and exams schedules.

**Personal skills and competences**

Computer skills and competences

European Computer Driving Licence (ECDL), October 2006. Very good knowledge of MatLab, Maple. Good knowledge of Statistica, Pov-Ray. Basic knowledge of C++, Visual Basic. Good knowledge of LaTeX.

Mother tongue(s)  
 Other language(s)

**Italian**

Self-assessment  
 European level(\*)

**English**  
**Frech**

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

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

Driving licence(s)

B (cars)

**Publications**

1 M. Badiale, G. Cappa, *Non radial solutions for a non homogeneous Hénon equation*, Nonlinear Anal. 109 (2014), 45-55.  
 2 G. Cappa, *Maximal  $L^2$  regularity for Ornstein-Uhlenbeck equation in convex sets of Banach spaces*, J. Differential Equations 260 (2016) 8051-8071.  
 3 G. Cappa, *On the Ornstein-Uhlenbeck operator in convex sets of Banach spaces*, arXiv:1503.02836.  
 4 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 (2016), <http://dx.doi.org/10.1016/j.jde.2016.09.011>  
 5 G. Cappa and S. Ferrari. *Sobolev regularity for infinite dimensional weighted elliptic problems on convex domains in Banach spaces*. 2016. ArXiv e-prints, <https://arxiv.org/abs/1609.07337>.

## Other

Collaboration with Zanichelli Test (ZTE) for the drafting of interactive exercises contained in the web site of the Publisher, with reference to books

- Bramanti et al., *Analisi Matematica 1*;
- Bramanti et al., *Analisi Matematica 2*.