

## CURRICULUM DI PAOLA MANNUCCI

(aggiornato a Maggio 2018)

Nata a Firenze il 26/08/1963. Sposata, due figli.

Professore Associato all'Universit' di Padova dal 2006.

Ricercatore Universitario all'Universit' di Firenze (1992-1997) e all'Universit di Padova (1997-2006).

FORMAZIONE Laurea in Matematica (Universita' di Firenze, 1987).

Borsa di Studio Istituto Nazionale di Alta Matematica (1988).

Dottorato in Matematica (Universita' di Firenze, 1993).

INTERESSI SCIENTIFICI Equazioni nonlineari a derivate parziali di tipo parabolico e ellittico degeneri. Giochi a campo medio non coercivi Giochi differenziali stocastici a somma non nulla. Ergodicita' e Omogenizzazione per equazioni subellittiche. Problemi a frontiera libera per equazioni paraboliche degeneri.

### PUBBLICAZIONI RECENTI (2013-2018)

M. Bardi, P. Mannucci "Comparison principles and Dirichlet problem for equations of Monge-Ampere type associated to vector fields", *Forum Math.*, 25 (2013), 1291-1330, IF 0.769

P. Mannucci "The Dirichlet problem for fully nonlinear elliptic equations non-degenerate in a fixed direction", *Commun. Pure Appl. Anal.* 13, 1, (2014) pp. 119-133, IF 0.708

P. Mannucci "Nash points for nonzero-sum stochastic differential games with separate Hamiltonians", *Dynamic Games and Applications*, 4, 3, (2014) pp. 329-344, IF 1.041

P. Mannucci, B. Stroffolini "Periodic homogenization under a hypoellipticity condition", *Nonlinear Differential Equations and Applications*, (NoDea Online 2014). DOI: 10.1007/s00030-014-0296-8, IF 0.971

P. Mannucci, C. Marchi, N. Tchou "The ergodic problem for some subelliptic operators with unbounded coefficients" *NoDEA Nonlinear Differential Equations Appl.* 23 (2016), no. 4, Art. 47, 26 pp.

P. Mannucci, C. Marchi, N. Tchou "Asymptotic behaviour for operators of Grushin type: invariant measure and singular perturbations" to appear in *DCDS-S*, 12,1, (2019), arXiv:1702.08809

P. Mannucci, C. Marchi, N. Tchou "Singular perturbations for a subelliptic operator", to appear in *ESAIM-COCV* DOI: 10.1051/cocv/2017063, arXiv:1702.01008

N. Dirr, F. Dragoni, P. Mannucci C. Marchi "Stochastic homogenization for functionals with anisotropic rescaling and non-coercive Hamilton-Jacobi equations." submitted, arXiv:1707.00553v1

S. Hamadene, P. Mannucci "Regularity of Nash payoffs of Markovian nonzero-sum stochastic differential games" submitted, arXiv:1711.02357

P. Mannucci, C. Marchi, C. Mariconda, N.Tchou "A note on non-coercive first order Mean Field Games with analytic data" submitted, arXiv:1805.01147

INVITI e SEMINARI su INVITO RECENTI: IHP Paris, Universidad Autonoma Madrid, Bologna, Roma, Rennes, Paris VII, Le Mans.

COMITATI SCIENTIFICI RECENTI: Session in "International Symposium on Dynamic Games and Appl." (2006), "Meeting on Hyperbolic equations" (2006), "Viscosity, metric, and control theoretic methods for nonlinear PDE's" (2010), "Mean Field Games and

Related Topics-2" (2013), "Nonlinear PDE's and applications (2016).

FONDI DI RICERCA (Dal 2005) PRIN 2005, 2007, 2009, Progetto di Ricerca di Ateneo 2008, 2017, Progetto di Ricerca GNAMPA (Istituto Nazionale di Alta Matematica) 2006, 2008, 2010, Progetto di Eccellenza CARIPARO 2010-2013, StartGrant Cariparo 2016-2019, Fondi DOR UNIPD.

## **CURRICULUM of PAOLA MANNUCCI**

Born in Firenze 26/08/1963. Married, two children.  
Associate Professor at the University of Padova since 2006.  
Researcher at the University of Firenze (1992-1997)  
and at the University of Padova (1997-2006).

EDUCATION Degree in Mathematics (Universita' di Firenze, 1987).  
INdAM fellowship (1988).  
Ph. D. in Mathematics (Universita' di Firenze, 1993).

SCIENTIFIC INTEREST Nonlinear degenerate elliptic and parabolic PDEs, Non-coercive Mean Filed Games, Nonzero-sum stochastic differential games, Ergodicity and Homogenization for subelliptic equations, Free Boundary problems for degenerate parabolic equations.

### RECENT PUBLICATIONS (2013-2018)

M. Bardi, P. Mannucci "Comparison principles and Dirichlet problem for equations of Monge-Ampere type associated to vector fields", *Forum Math.*, 25 (2013), 1291-1330, IF 0.769

P. Mannucci "The Dirichlet problem for fully nonlinear elliptic equations non-degenerate in a fixed direction", *Commun. Pure Appl. Anal.* 13, 1, (2014) pp. 119-133, IF 0.708

P. Mannucci "Nash points for nonzero-sum stochastic differential games with separate Hamiltonians", *Dynamic Games and Applications*, 4, 3, (2014) pp. 329-344, IF 1.041

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N. Dirr, F. Dragoni, P. Mannucci C. Marchi "Stochastic homogenization for functionals with anisotropic rescaling and non-coercive Hamilton-Jacobi equations." submitted, arXiv:1707.00553v1

S. Hamadene, P. Mannucci "Regularity of Nash payoffs of Markovian nonzero-sum stochastic differential games" submitted, arXiv:1711.02357

P. Mannucci, C. Marchi, C. Mariconda, N. Tchou "A note on non-coercive first order Mean Field Games with analytic data" submitted, arXiv:1805.01147

Recent invited visits and talks: IHP Paris, Universidad Autonoma Madrid, Bologna, Roma, Rennes, Paris VII, Le Mans.

Recent scientific and organizing committees: Session in "International Symposium on Dynamic Games and Appl." (2006), "Meeting on Hyperbolic equations" (2006), "Viscosity, metric, and control theoretic methods for nonlinear PDE's" (2010), "Mean Field Games and Related Topics-2" (2013), "Nonlinear PDE's and applications (2016).

Grants: PRIN 2005, 2007, 2009, Progetto di Ricerca di Ateneo 2008, 2017, Progetto di Ricerca GNAMPA (Istituto Nazionale di Alta Matematica) 2006, 2008, 2010, Progetto di Eccellenza CARIPARO 2010-2013, StartGrant Cariparo 2016-2019.