

PROGRAMMA Welcome Home 2015

LUNEDI' 21 dicembre mattino Aula Magna

9.00-9.20 Introduzione e saluti ai partecipanti

9.20-10.05 Emilio Zappa (*Courant Institute of Mathematical Sciences, New York University*) Monte Carlo methods in differential geometry.

10.05-10.50 Mauro Porta (*Université de Paris VII e Università degli studi di Firenze*) From enumerative geometry to derived geometry.

10.50 Coffee break

11.10-11.40 Davide Alberelli (*University of Osnabrück, Osnabrück, Germany*) Local Picard Group of Stanley-Reisner Rings.

11.50-12.10 Andrea Ricolfi (*University of Stavanger, Norway*) Famiglie di curve di Abel-Jacobi.

LUNEDI' 21 dicembre pomeriggio Sessioni parallele.

Sessione 1 Aula C

14.15-14.45 Emiliano Torre (*Institute of Neuroscience and Medicine (INM-6) and Institute for Advanced Simulation (IAS-6) and JARA BRAIN Institute I, Jülich Research Centre, Jülich, Germany*) Analysis of spike synchronization in massively parallel spike trains. I: SPADE: synchronous pattern detection and evaluation.

14.45-15.15 Pietro Quaglio (*Institute of Neuroscience and Medicine (INM-6) and Institute for Advanced Simulation (IAS-6) and JARA BRAIN Institute I, Jülich Research Centre, Jülich, Germany*) Analysis of spike synchronization in massively parallel spike trains. II: results from macaque motor cortex during an instructed-delay reach-to-grasp task.

15.15-15.45 Massimiliano Tamborrino (*Johannes Kepler University Linz, Institute for Stochastics*) Approximation of the first passage time density of a Wiener process to an exponentially decaying boundary by two-piecewise linear threshold. Application to neuronal spiking activity.

15.45-16.15 Nicola Soave (*Justus-Liebig-Universität, Giessen, Germany*) On phase-separation phenomena in elliptic systems with strong competition.

16.15 Coffee break-sessione poster

Sessione 2 Aula Info 5

14.15-14.45 Giorgio Laguzzi (Albert-Ludwigs-Universität Freiburg) Amoeba for uncountables

14.45-15.15 Francesco Cattafi (*Universiteit Utrecht, Utrecht, The Netherlands*) From Lie groups to Lie groupoids.

15.15-15.45 Andrea Vaccaro (*University of Pisa*) C^* -algebras and B-names for Complex Numbers.

15.45-16.15 Presentazione dei poster

16.15-16.45 Coffee break-Sessione poster

16.45-18.00 Sessione poster

MARTEDI' 22 dicembre mattino Aula Magna

9.00-9.45 Andrea Mondino (*Zürich University, Zürich, Switzerland*) Ricci curvatures via optimal transport and extensions to non-smooth spaces.

9.45-10.30 Alberto Carignano (*University of Washington*) Costruzione di circuiti sintetici per organizzazione multicellulare in *S.cerevisiae*.

10.30-11.00 Alessandro Vignati (*York University, Toronto, Ontario, Canada*) On Ulam stability.

11.00-11.30 Coffee break

11.30 Tavola rotonda: difficoltà e soddisfazioni nell'esperienza del dottorato o dell'attività di ricerca all'estero. Qualche suggerimento da chi la ha vissuta di recente o la sta affrontando ora.

MARTEDI' 22 dicembre pomeriggio Sessioni parallele

Sessione 1 Info 5

14.30-15.00 Alberto Antonioni (*Carlos III University of Madrid, Spain*) Spatial cooperation among humans: experimental results.

15.00-15.30 Michele Voto (*ESR fellow in the ITN Wall network at Universidad de Salamanca*) Simulating magnetic domain wall dynamics: future devices for applications.

15.30-16.00 Dragana Vuckovic (*Sidra Medical and Research Center, Doha, Qatar*) Metodi matematici per la genetica.

16.00-16.30 Gianluca De Tommaso (*University of Bath*) Multilevel MCMC in Uncertainty Quantification.

Sessione 2 Aula C

14.30-15.00 Fabio Tanturri (*Aix-Marseille Université, Marseille, Francia*) Curve e fattorizzazioni in matrici.

15.00-15.30 Elena Martinengo (*Leibniz Universität, Hannover, Germany*) Deformazioni e algebre differenziali graduate.

15.30-16.00 Lorenzo Prelli (*University of Washington, Seattle, USA*) Rationalizing divisors.

16.00-16.30 Michela Mazzoli (*Alpen-Adria-Universität, Klagenfurt, Austria*) Generalised Number Systems.

Sessione 3 Aula Lagrange

14.30-15.00 Riccardo Maffucci (*King's College London, Regno Unito*) Nodal intersections of random eigenfunctions with a segment on the torus.

15.00-15.30 Giovanni Rosso (*University of Cambridge, Cambridge, UK*) Variazioni p -adiche in teoria dei numeri.

15.30-16.00 Stefano Marseglia (*Stockholms Universitet, Stoccolma, Svezia*) Classi di isomorfismo di varietà abeliane (principalmente polarizzate) su campi finiti.

16.00-16.30 Fabrizio Barroero (*Scuola Normale Superiore di Pisa*) Sull'equazione di Pell polinomiale.

Sessione 4 Aula 3

14.30-15.00 Alessandro Audrito (*Università di Torino- Universidad autónoma de Madrid*) *The FKPP Problem. From the Linear to the Doubly Nonlinear Diffusion.*

15.00-15.30 Luca Alasio (*Mathematical Institute, University of Oxford*) Nonlinear diffusion and tumour growth.

15.30-16.00 Gianluca Basso (*Université de Lausanne, Losanna, Svizzera*) Quozienti di Limiti Proiettivi di Fraissé.

16.00-16.30 Niccolò Lora Lamia Donin (*Gottfried Wilhelm Leibniz Universität Hannover*) On a family of endomorphisms on hypercomplex manifolds of curves.