PROGRAM OF MATA2020

Multivariate Approximation: Theory and Applications
Perugia, January 16-18, 2020

Thursday, January 16, 2020

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE, Via Vanvitelli 1

Room A2

10.30 – 11.00	Registration
11.00 – 11.30	Opening
	Chair: **Stefano De Marchi**
11.30 – 12.15	Plenary Talk: *Quasi interpolation and applications using radial basis functions* (**Martin Buhmann, University of Giessen, Germany**)
12.20 – 12.40	*An Adaptive Scheme based on Two Stages for Solving Elliptic PDEs through RBF Collocation Methods* (**Roberto Cavoretto, University of Torino, Italy**)
12.40 – 13.00	*On the cosine operator function framework of certain approximation processes in Banach spaces* (**Andi Kivinukk, University of Tallin, Estonia**)
	Chair: **Michele Campiti**
14.40 – 15.00	*Boundary Point Method and the Mann–Dotson Algorithm in Banach Spaces* (**Luigi Muglia, University of Calabria, Italy**)
15.00 – 15.20	*Approximations of fuzzy numbers by severel types of approximation operators* (**Lucian Coroianu, University of Oradea, Romania**)
15.20 – 15.40	*Cheating with the domain: the Fake Nodes approach as an interpolation paradigm* (**Davide Poggiali, University of Padova, Italy**)
15.40 – 16.00	*Kantorovich-type operators on mobile intervals* (**Vita Leonessa, University of Basilicata, Italy**)
16.00 – 16.20	*A symbol-related geometric mean of Toeplitz matrices* (**Elena Addis, University of Perugia, Italy**)
16.20 – 16.50	Coffee Break (Meeting Room, 5th floor)

	Chair: **Francesco Dell'Accio**
16.50 – 17.10	*Dual Interpolatory Subdivision* (**Alberto Viscardi, University of Bologna, Italy**)
17.10 – 17.30	*On Urysohn type integral form of Generalized Sampling Operators* (**Harun Karsli, University of Bolu Abant Izzet Baysal, Turkey**)
17.30 – 17.50	*Numerical solution of Cauchy singular integral equations with additional fixed singularities of Mellin convolution type* (**Maria Carmela De Bonis, University of Basilicata, Italy**)
17.50 – 18.10	*Critical point theory and its applications to difference equations* (**Pasquale Candito, Mediterranean University of Reggio Calabria, Italy**)
20.00	**Dinner with Choccolate Tasting at Ristorante Buonenuove (Via Campo di Marte 134)** **Bus service available: meeting point in Piazza Italia at 19.45**

Friday, January 17, 2020

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE, Via Vanvitelli 1

Room A2

	Chair: **Elisa Francomano**
9.00 – 9.45	Plenary Talk: *Sum Rules in Hermite Subdivision* (**Tomas Sauer, University of Passau, Germany**)
9.50 – 10.35	Plenary Talk: *A new look at approximation problems* (**Sergey Tikhonov, CRM, Spain**)
10.40 – 11.00	*On the Solution of Fractional Differential Problems by Quasi-Interpolant Operators* (**Francesca Pitolli, University of Roma La Sapienza, Italy**)
11.00 – 11.30	Coffee Break (Meeting Room, 5th floor)
	Chair: **Costanza Conti**
11.30 – 11.50	*On derivative sampling using Kantorovich-type sampling operators* (**Gert Tamberg, Tallin University of Technology, Estonia**)

11.50 – 12.10	*Inverting Laplace Transform by a performing RBF-based fitting model* (**Rosanna Campagna, University of Napoli Federico II, Italy**)
12.10 – 12.40	*Interpolation of Hermite-type data via scalar subdivision schemes* (**Rafael Diaz Fuentes, University of Insubria, Italy**)
12.40 – 13.00	*Approximating the solutions of differential inclusions driven by measures* (**Valeria Marraffa, University of Palermo, Italy**)
	Chair: **Len Bos**
14.40 – 15.00	*Two Problems Related To Iterative Sequences and Fixed Points* **(Vittorio Colao, University of Calabria, Italy**)
15.00 – 15.20	*On some generalizations of Bernstein-Durrmeyer operators on hypercubes* (**Mirella Cappelletti Montano, University of Bari, Italy**)
15.20 – 15.40	*The Material Point Method for large deformation problems in engineering. A grid-based vs a mesh-free approach* (**Antonia Larese, University of Padova, Italy**)
15.40 – 16.00	*A numerical method for the generalized Love integral equation* (**Luisa Fermo, University of Cagliari, Italy**)
16.00 – 16.20	*New smoothness and monotonicity properties of (strictly) positive definite isotropic functions on Hilbert spheres* (**Janin Jaeger, Justus-Liebig University, Germany**)
16.20 – 16.50	Coffee Break (Meeting Room, 5th floor)
	Chair: **Carlo Bardaro**
16.50 – 17.10	*Lower semi-frames and sequences of integer translates* (**Rosario Corso, University of Palermo, Italy**)
17.10 – 17.30	*Convergence in phi-variation and Rate of Approximation in N-dimension with the Help of Summability Method* (**Ismail Aslan, Hacettepe University, Turkey**)
17.30 – 18.30	Poster Session (Meeting Room, 5th floor)
20.00	**Gala Dinner at the Restaurant of Hotel Brufani (Piazza Italia 12)**

Saturday, January 18, 2020

SALA CONSILIARE DELLA PROVINCIA, Piazza Italia 11

	Chair: **Gianluca Vinti**
9.00 – 9.45	Plenary Talk: *Approximation by deep CNNs in deep learning* (**Ding-Xuan Zhou, City University of Hong Kong, Hong Kong**)
9.50 – 10.10	*Sampling and stable recovery of planar regions with algebraic boundaries* (**Costanza Conti, University of Firenze, Italy**)
10.10 – 10.30	*Multinode rational operators for scattered data interpolation: recent advances and future perspectives* (**Francesco Dell'Accio, University of Calabria, Italy**)
10.30 – 11.00	Coffee Break
11.00 – 12.55	R.IT.A. round table
12.55 – 13.00	Closing
13.00 – 14.00	Light Lunch