



Xmaths Workshop

Università degli Studi di Bari Aldo Moro,
Dipartimento di Matematica

December 21-22, 2022

PROGRAM

Wednesday, December 21

8:45 *Registration*

9:00 *Opening:*

Prof. Anna Maria Candela (Head of the Mathematics Department)

Prof. Francesca Mazzia (Coordinator of the Ph.D. Programme in Computer Science and Mathematics)

9:30 Nicola Picoco (Università degli Studi di Bari Aldo Moro)

Cayley-Bacharach property: from the ancient geometry to the modern algebraic geometry

10:00 Angelina Zheng (Università degli Studi Roma Tre)

Cohomology of moduli spaces of trigonal curves

10:30 Alessandro Camasta (Università degli Studi di Bari Aldo Moro)

The first shadows of Control Theory in the realm of Parabolic Equations: the tale of a degenerate operator in non divergence form that generated contraction semigroups

11:00 *Coffee break*

11:30 Marco Inversi (University of Basel)

Weak-strong uniqueness and vanishing viscosity for Incompressible Euler equations in exponential spaces

12:00 Claudio Mele (Università del Salento)

Estimates between time-frequency representations and Donoho-Stark type uncertainty principles

12:45 *Social lunch at "Le Officine Clandestine"*

15:00 Luciano Maino (University of Bristol)

Look up and Project: Abelian Varieties and Post-Quantum Cryptography

15:30 Irene De Blasi (Università degli Studi di Torino)

Examples of chaos in galactic billiards

16:00 *Coffee break*

16:30 Antonio De Carlo (MER MEC S.p.A.)
Applications of Signal Analysis in railway safety

17:00 Arturo De Marinis (Gran Sasso Science Institute)
Stable training of neural ordinary differential equations

Thursday, December 22

9:30 Alessandro Lupoli (TU München)
Signal Processing: One-Bit Sigma-Delta Modulation

10:00 Grazia Gargano (Università degli Studi di Bari Aldo Moro & Istituto Tumori Bari Giovanni Paolo II - IRCCS)
Low-rank in hematologic oncology: a NMF-based approach for gene signature identification to support mediastinal gray zone lymphoma diagnosis

10:30 Federica Mennuni (Università degli Studi di Bari Aldo Moro)
Generalized quasilinear elliptic equations in \mathbb{R}^N

11:00 *Coffee break*

11:30 Giovanni Gentili (Università degli Studi di Torino)
An introduction to HKT geometry

12:00 Giovanni Russo (Università degli Studi dell'Aquila)
GKM actions on cohomogeneity one manifolds

12:45 *Lunch break*

15:00 Federico Girotti (University of Nottingham)
Long-time behaviour of repeated indirect quantum measurements

15:30 Giacomo Cappiello (Università degli Studi di Firenze)
SudoQ: a quantum variant of the Sudoku

16:00 Giulia Bevilacqua (Università di Pisa)
Looking for minimal surfaces: the Kirchhoff-Plateau problem

16:30 *Closing & Coffee*

Organizers:

Dario Di Pinto
Marco Gallo
Antonio Lagioia
Nicola Picoco
Laura Selicato
Gaetano Settembre
Caterina Sportelli
Paola Zurlo