12th International ISAAC Congress

Programme

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Programme

Welcoming address

The ISAAC board, the Local Organising Committee and the Department of Mathematics at Imperial College London, are pleased to welcome you to the 12th International ISAAC Congress in Aveiro. The 12th International ISAAC congress continues the successful series of meetings previously held in the Delaware, USA (1997), Fukuoka, Japan (1999), Berlin, Germany (2001), Toronto, Canada (2003), Catania, Italy (2005), Ankara, Turkey (2007), London, UK (2009), Moscow, Russia (2011), Krakow, Poland (2013), Macao, China (2015), and Växjö, Sweden (2017).

The success of such a series of congresses would not be possible without the valuable contributions of all the participants.

We acknowledge the financial support for this congress given by

the *FCT–Fundação para a Ciência e a Tecnologia* (FCT), through the *Fundo de Apoio à Comunidade Científica* (FACC),

the *Universidade de Aveiro* (UA),

the *Center for Research and Development in Mathematics and Applications* (CIDMA),

and the *Departamento de Matemática da Universidade de Aveiro.*

Also, we wish to thank the many Portuguese companies who's support was crucial for the success of this event:

Nestlé Portugal,   *Porto de Aveiro,*   *Real Companhia Velha,*   *Sociedade da Água Luso,*

TAP Air Portugal,   *The Navigator Company,*   and   *Turismo Centro de Portugal,*

ISAAC Board
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Jens Wirth (Stuttgart, Germany)
Man Wah Wong (Toronto, Canada)

Local Organising Committee
Paula Cerejeiras (Chair)
Uwe Kähler
James Kennedy (Lisboa)
Milton Ferreira (Leiria)
Nelson Vieira

with further support by Cláudio Henriques and Fábio Henriques (technical support) as well as further student helpers.

Schedules

Plenary lectures and events

Sunday, 28 July, Departamento de Matemática (Building 11)

Early registration and welcome drink will take place from 17:00 until 19:00.

Monday, 29 July, Auditório Renato Araújo (Rectorate Building)

09:30 – 10:30		*Opening Ceremony*
10:30 – 11:00	Coffee-break	
11:00 – 12:00	Karlheinz Gröchenig	*Totally positive functions in sampling theory and time-frequency analysis*

After the afternoon sessions you are kindly invited to a *Porto D'Honra* reception at the hall of the Rectorate Building, from 19:00 to 20:00.

Tuesday, 30 July, Auditório Renato Araújo (Rectorate Building)

09:00 – 10:00	Afonso S. Bandeira	*Statistical Estimation with Algebraic Structure: Statistical and Computational Considerations*
10:00 – 11:00	Tohru Ozawa	*Self-similar solutions to the derivative nonlinear Schrödinger equation*
11:00 – 11:30	Coffee-break	

The Board meeting will take place on *Sala do Senado, Rectorate Building*, at 19:00.

Wednesday, 31 July, Auditório Renato Araújo (Rectorate Building)

09:00 – 10:00	Alexander Grigor'yan	*Analysis on fractal spaces and heat kernels*
10:00 – 11:00	André Neves	*Recent progress in the theory of minimal surfaces*
11:00 – 11:30	Coffee-break	
11:30 – 12:30		Poster session

Wednesday afternoon/evening an excursion and a conference dinner will take place. This is for ticket holders only and tickets can be bought / reserved until Sunday, July 21. The excursion will start by bus at 15:30, after the group photo (15:00 - 15:15). The conference dinner will take place in *Quinta das Azenhas do Boco*.

Thursday, 1 August, Auditório Renato Araújo (Rectorate Building)

09:00 – 10:00	Samuli Siltanen	*Inverse Problems and the Nonlinear Fourier Transform*
10:00 – 11:00	Durvudkhan Suragan	*Hardy inequalities on homogeneous groups*
11:00 – 11:30	Coffee-break	

Friday, 2 August, Auditório Renato Araújo (Rectorate Building)

09:00 – 10:00	Håkan Hedenmalm	*Planar orthogonal polynomials and related point processes: random norm matrices and arithmetic jellium*
10:00 – 11:00	Roman Novikov	*Multidimensional inverse scattering problem*
11:00 – 11:30	Coffee-break	
11:30 – 12:00		*Closing Ceremony*

During the conference, the registration desk will be open on **sala do senado**, in the rectorate building, from Monday to Friday, between 10:00 and 12:00.

Joint session - S.2 Complex Analysis and Partial Differential Equations, and S.4 Complex Variables and Potential Theory

Organisers:
Okay Celebi, Sergei Rogosin,
Tahir Aliyev Azeroglu, Massimo Lanza de Cristoforis, Anatoly Golberg, Sergiy Plaksa

Tuesday, 30 July, Room 23.1.7

14:00 − 14:30	Alberto Cialdea	*Completeness theorems for systems of particular solutions of partial differential equations*
14:30 − 15:00	Anatoly Golberg	*Nonlinear Beltrami equation*
15:00 − 15:30	Grzegorz Lysik	*Higher order mean value functions and polyharmonic functions*
15:30 − 16:00	Pravati Sahoo	*Some Radius Problems on Certain Subclass of Analytic Functions*

Joint session - S.9 Generalized Functions and Applications, S.12 Harmonic Analysis and Partial Differential Equations, and S.16 Pseudo Differential Operators

Organisers:
Michael Kunzinger, Michael Oberguggenberger, Stefan Pilipović,
Vladimir Georgiev, Tohru Ozawa, Michael Ruzhansky, Jens Wirth,
Shahla Molahajloo, Man Wah Wong

Tuesday, 30 July, Room 23.1.5

11:30 – 12:00	Bojan Prangoski	*Ellipticity and the Fredholm property in the Weyl-Hörmander calculus*
12:00 – 12:30	Michael Kunzinger	*Parameter-dependent linear ODE and topology of domains*
12:30 – 14:00	Lunch	
14:00 – 14:30	David Rottensteiner	*Harmonic and Anharmonic Oscillators on the Heisenberg Group*
14:30 – 15:00	Petar Popivanov	*Boundary value problem for the biharmonic operator in a ball*
15:00 – 15:30	Patrik Wahlberg	*Strong continuity on Shubin-Sobolev spaces of semigroups for evolution equations of quadratic operators*
15:30 – 16:00	Ivana Vojnović	*Defect distributions applied to differential equations with polynomial coefficients*

S.1 Applications of dynamical systems theory in biology

Organisers:
Torsten Lindström

Monday, 29 July, Room 23.3.14

14:00 – 14:30	Gergely Röst	*Global dynamics of a new delay logistic equation arisen in cell biology*
14:30 – 15:00	Rakesh Kumar	*Exponential stability of inertial BAM neural network with time-varying impulses and mixed time-varying delays*
15:00 – 15:30	Anatoli Ivanov	*Two-dimensional differential delay systems as mathematical models of physiological processes*
15:30 – 16:00	Shigui Ruan	*Bifurcations on Invariant Tori in Predator-prey Models with Seasonal Prey Harvesting*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Baya Takhedmit	*A Parametric Uncertainty Analysis of stochastic boolean network*
17:00 – 17:30	Ana P. Lemos-Paião	*Applications of optimal control theory to cholera*
17:30 – 18:00	Cristiana J. Silva	*Stability and optimal control of a delayed HIV/AIDS-PrEP model*
18:00 – 18:30	Natali Hritonenko	*Age- and size-structured models of population dynamics: optimal control and sustainability*

Wednesday, 31 July, Room 23.3.14

14:00 – 14:30	Karlygash Nurtazina	*Identification algorithm for differential equation with memory in biomathematical problems*
14:30 – 15:00	Telmo Peixe	*From Lotka-Volterra systems to Polymatrix Replicators*
15:30	Excursion and Congress Dinner	

Friday, 2 August, Room 23.3.14

12:00 – 12:30	Luisa Malaguti	*Viscous profiles in models of collective movement with negative diffusivity*
12:30 – 13:00	Flavia Lanzara	*On the limit configuration of four species strongly competing systems*
13:00 – 14:30	Lunch	
14:30 – 15:00	Gulden Murzabekova	*The inverse problem on tree graph with attached masses from the point of view of neurobiology*
15:00 – 15:30	Yan Fyodorov	*Nonlinear analogue of the May-Wigner instability transition*
15:30 – 16:00	Valery Gaiko	*Global bifurcations of limit cycles and strange attractors in multi-parameter polynomial dynamical systems*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Yuanji Cheng	*t.b.a.*
17:00 – 17:30	Torsten Lindström	*Destabilization, stabilization, and multiple attractors in saturated mixotrophic environments*

S.2 Complex Analysis and Partial Differential Equations

Organisers:
Okay Celebi, Sergei Rogosin

Monday, 29 July, Room 23.3.15

14:00 – 14:30	Rui Marreiros	*On the dimension of the kernel of a singular integral operator with non-Carleman shift and conjugation*
14:30 – 15:00	Bakur Gulua	*Derivation of system of the equations of equilibrium for shallow shells and plates with voids*
15:00 – 15:30	Natalia Chinchaladze	*Existence and Uniqueness Theorem for Cusped Kelvin-Voigt Elastic Plates in the Zero Approximation of the Hierarchical Models*
15:30 – 16:00	Xiaoyin Wang	*2-D Frequency-Domain System Identification*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Nusrat Rajabov	*To theory one class of three-dimensional integral equation with super-singular kernels by tube domain*
17:00 – 17:30	Mohamed Kainane Mezadek	*Global existence for coupled to the structurally damped σ-evolution model*
17:30 – 18:00	Madi Muratbekov	*On the existence and compactness of the resolvent of a Schrödinger operator with a negative parameter*
18:00 – 18:30	Abdelkerim Chaabani	*Well-posedness and asymptotic results of 3D Burgers equation in Gevrey class*

Tuesday, 30 July, Room 23.3.4

16:30 – 17:00	Umit Aksoy	*Integral representations and some boundary value problems in Clifford analysis*
17:00 – 17:30	Nino Manjavidze	*On the structure of generalized analytic function in the vicinity of singular point*
17:30 – 18:00	Carmen Judith Vanegas	*A Robin boundary value problem for the Bitsadze equation*
18:00 – 18:30	A. Okay Celebi	*Boundary Value Problems in Polydomains*

Wednesday, 31 July, Room 23.3.4

13:30 – 14:00	Mounia Zaabi	*Analytical study to a 3D-regularized Boussinesq system*
14:00 – 14:30	Yongmin Liu	*The product-type operators from logarithmic Bloch spaces to Zygmund-type spaces*
14:30 – 15:00	Huang Yun	*Paley–Wiener-type Theorem for Analytic Functions in Tubular Domains*
15:30	Excursion and Congress Dinner	

S.3 Complex Geometry

Organisers:
ALEXANDER SCHMITT

Monday, 29 July, Room 11.1.31

14:00 − 14:30	Florent Schaffhauser	*Higher Teichmüller spaces for orbifolds*
14:30 − 15:00	Peter Gothen	*$SO(p, q)-$Higgs bundles and higher Teichmüller components*
15:00 − 15:30	Martha Romero	*On Galois group of factorized covers of curves*
15:30 − 16:00	Emilio Franco	*Cartan branes on the Hitchin system*
16:00 − 16:30	Coffee-break	
16:30 − 17:00	Ana Casimiro	*Higgs bundles and Schottky representations*
17:00 − 17:30	Camilla Felisetti	*Intersection cohomology of the moduli space of Higgs bundles on a smooth projective curve*

Thursday, 1 August, Room 11.1.30

11:30 − 12:00	Ana Peon-Nieto	*Mirror symmetry on some non generic loci of the Hitchin system*
12:00 − 12:30	Norbert Hoffmann	*Universal torsors over degenerating del Pezzo surfaces*
12:30 − 14:00	Lunch	
14:00 − 14:30	Carlos Florentino	*Generating Functions for Hodge-Euler polynomials of GL(n,C)-character varieties*
14:30 − 15:00	Tom Sutherland	*Theta functions on moduli spaces of local systems*
15:00 − 15:30	Demessie Ergabus Birmechu	*Zero free Region of Fractional Hypergeometric Zeta function*
15:30 − 16:00	Francesco Polizzi	*Surface braid groups, finite Heisenberg covers and double Kodaira fibrations*
16:00 − 16:30	Coffee-break	
16:30 − 17:00	Viktoria Heu	*The Riemann-Hilbert mapping in genus two*
17:00 − 17:30	Ángel Luis Muñoz-Castañeda	*Compactification of the moduli space of stable principal G-bundles over a stable curve and beyond*
17:30 − 18:00	Angela Ortega	*Klein coverings of genus 2 curves*

S.4 Complex Variables and Potential Theory

Organisers:
Tahir Aliyev Azeroglu, Massimo Lanza de Cristoforis, Anatoly Golberg, Sergiy Plaksa

Monday, 29 July, Room 23.3.5

14:00 – 14:30	Gabriela Kohr	*Approximation properties and related results for univalent mappings in higher dimensions*
14:30 – 15:00	Fiana Jacobzon	*Linearization of holomorphic semicocycles*
15:00 – 15:30	Iryna Denega	*Extremal decomposition of the complex plane with free poles*
15:30 – 16:00	Liudmyla Vyhivska	*Extremal problem for domains that is non-overlapping with free poles on the circle*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Tuğba Akyel	*Some Remarks on the Uniqueness Part of Schwarz Lemma*
17:00 – 17:30	Krzysztof Maciaszek	*On polynomial extension property*
17:30 – 18:00	Mohamed M S Nasser	*Numerical computation of conformal capacity of generalized condensers*
18:00 – 18:30	Vitalii Shpakivskyi	*Hypercomplex method for solving linear PDEs*

Tuesday, 30 July, Room 23.3.5

11:30 – 12:00	Grigori Giorgadze	*On the irregular generalized Cauchy-Riemann equations*
12:00 – 12:30	Makhmud Sadybekov	*Nonlocal boundary value problems for the Laplace operator in a unit ball which are multidimensional generalizations of the Samarskii-Ionkin problem*
12:30 – 14:00	Lunch	
16:30 – 17:00	Matteo Dalla Riva	*Existence, uniqueness, and regularity properties of the solutions of a nonlinear transmission problem*
17:00 – 17:30	Paolo Musolino	*Converging expansions for Lipschitz self-similar perforations of a plane sector*
17:30 – 18:00	Paolo Luzzini	*Shape analysis of the longitudinal flow along a periodic array of cylinders*
18:00 – 18:30	Mohammed Alip	*Stokes' Theorem and the Cauchy - Pompeiu Formula for Polydisc*

S.4 Complex Variables and Potential Theory

Organisers:
Tahir Aliyev Azeroglu, Massimo Lanza de Cristoforis, Anatoly Golberg, Sergiy Plaksa

Friday, 2 August, Room 23.3.15

12:00 – 12:30	Christopher Green	*Harmonic measure distribution functions on spherical and toroidal surfaces*
12:30 – 13:00	Luis Manuel Tovar Sanchez	*Weierstrass Theorem for Bicomplex Holomorphic Functions*
13:00 – 14:30	Lunch	
14:30 – 15:00	Serhii Gryshchuk	*Monogenic functions in 2-D commutative Complex algebras to plane orthotropy*
15:00 – 15:30	Bogdan Klishchuk	*Lower bounds for the volume of the image of a ball*
15:30 – 16:00	Mitja Nedic	*Support of Borel measures in the plane satisfying a certain positivity condition*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Massimo Lanza de Cristoforis	*An inequality for Hölder continuous functions, in the wake of the work of Carlo Miranda*
17:00 – 17:30	Sergiy Plaksa	*A functionally-analytic method for modelling spatial axial-symmetric flows of ideal fluid*

S.5 Constructive Methods in the Theory of Composite and Porous Media

Organisers:
Vladimir Mityushev

Tuesday, 30 July, Room 23.3.9

11:30 – 12:00	Mikhail Borsuk	*The Robin problem in conical domains*
12:00 – 12:30	Vladimir Mityushev	*R-linear problem and its application to random composites*
12:30 – 14:00	Lunch	
14:00 – 14:30	Olaf Bar	*Fast method for 2D Dirichlet problem for circular multiply connected domains*
14:30 – 15:00	Piotr Drygaś	*Effective elastic constants for 2D random composites*
15:00 – 15:30	Wojciech Baran	*Local Fields*
15:30 – 16:00	Wojciech Nawalaniec	*Classifying and analysis of random composites using structural sums feature vector*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Paweł Kurtyka	*On quantitative assessment of In-situ and ex-situ composites structures with micro and nano-particles reinforcement*
17:00 – 17:30	Marta Bryla	*Conductivity of two-dimensional composites with randomly distributed elliptical inclusions: Random elliptical inclusions*
17:30 – 18:00	Roman Czapla	*Estimations of the effective conductivity of composites with non-circular inclusions*
18:00 – 18:30	Natalia Rylko	*Inverse problem for spherical particles and its applications to metal matrix composites reinforced by nano TiC particles*

Thursday, 1 August, Room 23.3.15

11:30 – 12:00	Jan Guncaga	*Education of Selected Notions Connected with Mathematical Analysis with Help of Visualization*
12:00 – 12:30	Miroslawa Sajka	*Three mental worlds of mathematics in pre-service mathematics teachers - an eye-tracking research*
12:30 – 13:00	Roman Rosiek	*Analysis of the degree of image complexity used in eye tracking research on STEM education*
13:00 – 14:30	Lunch	
14:30 – 15:00	Ismail Ezzaraa	*Mechanical properties of glass fiber reinforced epoxy resin composites by a micromechanical approach*
15:00 – 15:30	Lamara Bitsadze	*Boundary Value Problems in the Theory of Elasticity for Materials with Double Voids for Infinite Strip*
15:30 – 16:00	Maia Svanadze	*Boundary integral equation method in the theory of binary mixtures of porous viscoelastic materials*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Hafida Atti	*Solution of Intuitionistic Fuzzy Linear Systems*
17:00 – 17:30	Kazimierz Rajchel	*Trygonometric approach to the Schrödinger equation as a general case of known solutions*

S.6 Fixed Point Theory, Ulam Stability, and Related Applications

Organisers:
ERDAL KARAPINAR, JANUSZ BRZDEK

Thursday, 01 August, Room 23.3.5

11:30 – 12:00	Krzysztof Cieplinski	*A fixed point theorem in n-Banach spaces and Ulam stability*
12:00 – 12:30	Safeer Hussain Khan	*Attractive Points by a Modern Iterative Process*
12:30 – 14:00	Lunch	
14:00 – 14:30	Alberto Simões	*Ulam Stabilities for a Class of Higher Order Integro-Differential Equations*
14:30 – 15:00	Amar Ould-Hammouda	*On Generalized a Class of Non Expansive mappings in Metric spaces*
15:00 – 15:30	İnci Erhan	*Application of F-contraction mappings to integral equations on time scales*
15:30 – 16:00	Özge Biçer Ödemiş	*Some related fixed point theorems for multivalued mappings on two metric spaces*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Redjel Najah	*Some fixed point results and extension of Karlovitz theorems*
17:00 – 17:30	Abdelkader Dehici	*Locally compact groups and fixed point properties for some Banach algebras*
17:30 – 18:00	Taoufik Sabar	*On best proximity point theory: From cyclic mappings to Tricyclic ones.*
18:00 – 18:30	Andreea Fulga	*Fixed points of discontinuous mappings*

Friday, 2 August, Room 23.3.4 (split session)

15:00 – 15:30	Siddharth Shete	*Locally Attractive Solution for Fractional order Nonlinear Volterra Random Integral Equation*
15:30 – 16:00	Tayeb Hadj Kaddour	*Local and global solution for effectively damped wave equations with non linear memory*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Faeem Ali	*New directions on generalized non-expansive mappings and approximation of fixed points*
17:00 – 17:30	Farida Belhannache	*Upper and lower solutions methods for impulsive Caputo-Hadamard fractional differential inclusions*
17:30 – 18:00	Bouchra Ben Amma	*Existence of Solutions to Boundary Value Problems for Intuitionistic Fuzzy Partial Hyperbolic Functional Differential Equations*
18:00 – 18:30	Hakima Bouhadjera	*More general common fixed point theorems under a new concept*

S.6 Fixed Point Theory, Ulam Stability, and Related Applications

Organisers:
Erdal Karapinar, Janusz Brzdek

Friday, 2 August, Room 23.3.5 (split session)

12:00 – 12:30	Erdal Karapinar	*Recent topics on metric fixed points*
12:30 – 13:00	Marija Cvetković	*Impact of Perov type results on Ulam-Hyers stability*
13:00 – 14:30	Lunch	
14:30 – 15:00	Anita Tomar	*On Existence of Fixed point and its applications in C??algebra valued Partial Metric Space*
15:00 – 15:30	Chanchal Garodia	*Approximating fixed points of Suzuki generalized nonexpansive mappings via new faster iterative algorithm*
15:30 – 16:00	Obaid Alqahtani	*A New Approach to Interval Matrices and Applications*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Buthinah ibn Dehaish	*On the existence of fixed points for monotone Lipschitzian mappings*
17:00 – 17:30	Dipti Thakur	*Picard-Mann hybrid iteration schemes for nonexpansive semigroup in CAT(0) spaces*
17:30 – 18:00	Izhar Uddin	*Some existence and convergence results for monotone mappings*

S.7 Function Spaces and Applications

Organisers:
ALEXANDRE ALMEIDA, ANTÓNIO CAETANO, STEFAN SAMKO

Monday, 29 July, Room 23.1.5

14:00 – 14:30	Dorothee D. Haroske	*Compact embeddings of Smoothness Morrey spaces on bounded domains*
14:30 – 15:00	Susana Moura	*Some embeddings of smoothness Morrey spaces in limiting cases*
15:00 – 15:30	Oscar Dominguez	*Characterizations of Besov spaces via K-functionals and ball averages*
15:30 – 16:00	Winfried Sickel	*Lizorkin-Triebel-Morrey Spaces and Differences*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Vakhtang Kokilashvili	*Integral operators in mixed norm weighted function spaces and application*
17:00 – 17:30	Alexander Meskhi	*Maximal and Calderón-Zygmund operators in extrapolation Banach function lattices and applications*
17:30 – 18:00	Ryskul Oinarov	*Boundedness of Riemann-Liouville operator from weighted Sobolev space to weighted Lebesgue space*
18:00 – 18:30	Hana Turčinová	*Characterization of functions with zero traces from Sobolev spaces via the distance function from the boundary*

Wednesday, 31 July, Room 23.3.5

13:30 – 14:00	Júlio Neves	*Embeddings of Sobolev-type spaces into generalized Hölder spaces*
14:00 – 14:30	Zdeněk Mihula	*Embeddings of homogeneous Sobolev spaces on the entire space*
14:30 – 15:00	Luboš Pick	*Moser meets Gauss*
15:30	Excursion and Congress Dinner	

Thursday, 1 August, Room 23.1.7

11:30 – 12:00	Peter Hästö	*Hölder continuity of quasiminimizers and ω-minimizers of functionals with generalized Orlicz growth*
12:00 – 12:30	Jihoon Ok	*Maximal regularity for local minimizers of non-autonomous functionals*
12:30 – 14:00	Lunch	
14:00 – 14:30	Oscar Blasco	*Notes on bilinear multipliers on Orlicz spaces*
14:30 – 15:00	Natasha Samko	*Embeddings of weighted local generalized Morrey spaces into Lebesgue spaces on fractal sets*
15:00 – 15:30	Tsira Tsanava	*Trigonometric approximation in weighted grand variable exponent Lebesgue spaces*
15:30 – 16:00	Akbota Abylayeva	*Weighted Hardy type inequalities with a variable upper limit*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Douadi Drihem	*Function spaces with general weights*
17:00 – 17:30	Takahiro Noi	*Embedding properties for weighted Besov-Morrey and Triebel-Lizorkin-Morrey spaces*
17:30 – 18:00	Stephan Dahlke	*On Besov Regularity of Solutions to Nonlinear Elliptic Partial Differential Equations*
18:00 – 18:30	M. Manuela Rodrigues	*Time-fractional telegraph equation*

S.7 Function Spaces and Applications

Organisers:
Alexandre Almeida, António Caetano, Stefan Samko

Friday, 2 August, Room 23.1.7

12:00 – 12:30	Oleksiy Karlovych	*Dual property of the Hardy-Littlewood maximal operator on reflexive variable Lebesgue spaces over spaces of homogeneous type*
12:30 – 13:00	Humberto Rafeiro	*Nonstandard bounded variation spaces*
13:00 – 14:30	Lunch	
14:30 – 15:00	Alexey Karapetyants	*Holomorphic Morrey, Orlicz, Grand Lebesgue and Hölder spaces*
15:00 – 15:30	Joel E. Restrepo	*Boundedness and compactness of composition operators in holomorphic and harmonic spaces of Hölder type functions*
15:30 – 16:00	Tao Qian	*n-best approximation in reproducing kernel Hilbert spaces*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Yerlan Nursultanov	*The Marcinkiewicz-Calderon type interpolation theorems*
17:00 – 17:30	Shakro Tetunashvili	*On Cantor's Λ functional and reconstruction of coefficients of multiple function series*
17:30 – 18:00	Nazerke Tleukhanova	*Hardy-Littlewood theorem for anisotropic Lorentz spaces*

S.8 Function Spaces and their Applications to Nonlinear Evolutional Equations

Organisers:
Mitsuru Sugimoto, Baoxiang Wang

Wednesday, 31 July, Room 23.3.11

14:00 − 14:30	Keiichi Kato	*Wave packet transform and estimate of solutions to Schrödinger equations in modulation spaces*
14:30 − 15:00	Xiuqing Chen	*Global Existence and Uniqueness Analysis of Reaction-Cross-Diffusion Systems*
15:30	Excursion and Congress Dinner	

Thursday, 01 August, Room 23.3.11

11:30 − 12:00	Joachim Toft	*Periodic ultra-distributions and periodic elements in modulation spaces*
12:00 − 12:30	Naohito Tomita	*Bilinear pseudo-differential operators with exotic symbols*
12:30 − 13:00	Yohei Tsutsui	*A sparse bound for an integral operator with wave propagator*
13:00 − 14:30	Lunch	
14:30 − 15:00	Lifeng Zhao	*Equivariant Schrödinger map from two dimensional hyperbolic spaces*
15:00 − 15:30	Nobu Kishimoto	*Ill-posedness of an NLS-type equation with derivative nonlinearity on the torus*
15:30 − 16:00	Xuecheng Wang	*Global regularity for the 3D relativistic massive Vlasov-Maxwell system*
16:00 − 16:30	Coffee-break	
16:30 − 17:00	Masaharu Kobayashi	*Operating functions on $A_s^q(\mathbf{T})$*
17:00 − 17:30	Tomoya Kato	*Boundedness of bilinear pseudo-differential operators with symbols in an $S_{0,0}$-type class*
17:30 − 18:00	Jayson Cunanan	*Inhomogeneous Strichartz estimates in some critical cases*

Friday, 2 August, Room 23.3.11

12:00 − 12:30	Koichi Taniguchi	*Gradient estimates for heat equation in an exterior domain*
12:30 − 13:00	Tzon-Tzer Lu	*Adomian Decomposition Method for Burgers' Equations*

S.9 Generalized Functions and Applications

Organisers:
Michael Kunzinger, Michael Oberguggenberger, Stefan Pilipović

Monday, 29 July, Room 23.1.7

14:00 – 14:30	Stevan Pilipović	*Wave fronts-new results*
14:30 – 15:00	Frederik Broucke	*Absence of remainders in the Wiener-Ikehara theorem*
15:00 – 15:30	Lenny Neyt	*Asymptotic boundedness in ultradistribution spaces*
15:30 – 16:00	Jasson Vindas	*Harmonic representations of generalized functions*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Nenad Antonić	*H-distributions and variants*
17:00 – 17:30	Irina Melnikova	*Integro-differential equations for probabilistic characteristics of continuous and intermittent processes in spaces of distributions*
17:30 – 18:00	Christian Bargetz	*Applications of topological tensor products to the theory of distributions*
18:00 – 18:30	Daniel Velinov	*f-Frequently hypercyclic C_0-semigroups*

Tuesday, 30 July, Room 23.1.7

16:30 – 17:00	Soon-Yeong Chung	*Fujita's Blow-up property of Discrete Reaction-Diffusion Equations on Networks*
17:00 – 17:30	Jaeho Hwang	*The eigenvalue problems for p-Schrödinger operators under the mixed boundary conditions on finite networks*
17:30 – 18:00	Sanja Konjik	*Variational problems of Herglotz type with complex order fractional derivatives and less regular Lagrangian*
18:00 – 18:30	Sanja Atanasova	*Characterization of wave front sets via multidimensional Stockwell transform*

Wednesday, 31 July, Room 23.1.7

13:30 – 14:00	Antonio R. G. Garcia	*A Differential Calculus in the Framework Colombeau's Full Algebra*
14:00 – 14:30	Walter Rodrigues	*Aragona Algebras*
14:30 – 15:00	Jailson Calado Silva	*Some results on the zero set of Generalized Holomorphic functions*
15:30	Excursion and Congress Dinner	

S.9 Generalized Functions and Applications

Organisers:
Michael Kunzinger, Michael Oberguggenberger, Stefan Pilipović

Thursday, 01 August, Room 23.1.6

11:30 – 12:00	Maximilian F. Hasler	*Singularities in equations of fluid dynamics and applications to hurricanes.*
12:00 – 12:30	Eduard Nigsch	*The geometrization of the theory of full Colombeau algebras*
12:30 – 13:00	Yunyun Yang	*Spectral asymptotics and generalized functions*
13:00 – 14:30	Lunch	
14:30 – 15:00	Chikh Bouzar	*On almost periodicity and almost automorphy*
15:00 – 15:30	Martin Schwarz	*Stochastic Fourier Integral Operators*
15:30 – 16:00	Michael Oberguggenberger	*Propagation of singularities for generalized solutions to nonlinear wave equations*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Natali Hritonenko	*Generalized functions in the optimal control of age-structured population models*
17:00 – 17:30	Akbarali Mukhammadiev	*Supremum, infimum and hyperlimits of Colombeau generalized numbers*
17:30 – 18:00	Diksha Tiwari	*Hyperseries of Colombeau generalized numbers*

Friday, 2 August, Room 23.3.10

12:00 – 12:30	Milica Žigić	*Some classes of stochastic evolution equations with Wick-type nonlinearities*
12:30 – 13:00	Todor D. Todorov	*Axiomatic Approach to Colombeau Theory*
13:00 – 14:30	Lunch	
14:30 – 15:00	Svetlana Mincheva-Kaminska	*Existence results concerning the convolution of ultradistributions*
15:00 – 15:30	Andrzej Kamiński	*The convolution of ultradistributions in the context of their supports*
15:30 – 16:00	Marko Nedeljkov	*Generalized solutions of conservation law systems containing the delta distribution*

S.10 Geometric & Regularity Properties of Solutions to Elliptic and Parabolic PDEs

Organisers:
Pierre Bousquet, Lorenzo Brasco, Rolando Magnanini

Monday, 29 July, Room 23.3.10

14:00 – 14:30	Bozhidar Velichkov	*On the logarithmic epiperimetric inequality*
14:30 – 15:00	Lorenzo Mazzieri	*Minkowski inequality and nonlinear potential theory - 1*
15:00 – 15:30	Virginia Agostiniani	*Minkowski inequality and nonlinear potential theory - 2*
15:30 – 16:00	Ilaria Lucardesi	*On Blaschke-Santaló diagrams involving the torsional rigidity and the first eigenvalue of the Dirichlet Laplacian*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Francesco Della Pietra	*An optimization problem in thermal insulation*
17:00 – 17:30	Wadade Hidemitsu	*On a maximizing problem for the Moser-Trudinger type inequality with inhomogeneous constraints*
17:30 – 18:00	Leonardo Trani	*A Quantitative Weinstock Inequality*
18:00 – 18:30	Phillipo Lappicy	*Quasilinear parabolic equations: from Sturm attractors to Ginzburg-Landau patterns*

Tuesday, 30 July, Room 23.3.10

11:30 – 12:00	Pieralberto Sicbaldi	*Overdetermined elliptic problems in exterior domains*
12:00 – 12:30	Lorenzo Cavallina	*On the pairs of domains that solve a two-phase overdetermined problem of Serrin-type*
12:30 – 13:00	Yachimura Toshiaki	*On a thin coating problem and its related inverse problem*
13:00 – 14:30	Lunch	
14:30 – 15:00	Eleonora Cinti	*Some recent results in the study of fractional mean curvature flow*
15:00 – 15:30	María Ángeles García-Ferrero	*Strong unique continuation for higher order fractional Schrödinger equations*
15:30 – 16:00	Matteo Cozzi	*Regularity and rigidity results for nonlocal minimal graphs*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Amal Attouchi	*Local regularity for viscosity solutions of quasilinear parabolic equations in nondivergence form*
17:00 – 17:30	Ángel Arroyo	*Asymptotic regularity for a random walk over ellipsoids*
17:30 – 18:00	Diego Berti	*Short-time asymptotics for solutions of the evolutionary game theoretic p-laplacian and Pucci operators*
18:00 – 18:30	Eero Ruosteenoja	*Regularity for the normalized p-Poisson problem*

Wednesday, 31 July, Room 23.3.10

14:00 – 14:30	Chiara Bianchini	*An anisotropic Bernoulli free boundary problem*
14:30 – 15:00	Michiaki Onodera	*Hyperbolic solutions to Bernoulli's free boundary problem*
15:30	Excursion and Congress Dinner	

Friday, 2 August, Room 23.3.4

12:00 – 12:30	Erik Lindgren	*Extremals for Morrey's inequality*
12:30 – 13:00	Michele Marini	*The sharp quantitative isocapacitary inequality*

S.11 Geometries Defined by Differential Forms

Organisers:
Mahir Bilen Can, Sergey Grigorian, Sema Salur

Tuesday, 30 July, Room 23.3.11

11:30 – 12:00	Emily Windes	*Contact Structures on G_2 Manifolds*
12:00 – 12:30	Jordan Watts	*Classifying Spaces of Diffeological Groups*
12:30 – 14:00	Lunch	
14:00 – 14:30	Dimiter Vassilev	*On a sub-Riemannian space associated to a Lorentzian manifold*
14:30 – 15:00	Hong Van Le	*Almost formality of closed G_2- and Spin(7) manifolds*
15:00 – 15:30	Luigi Vezzoni	*Geometric flows of closed forms*
15:30 – 16:00	Alexei Kovalev	*A compact G_2-calibrated manifold with first Betti number $b_1 = 1$.*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Jason Lotay	*Ancient solutions in Lagrangian mean curvature flow*
17:00 – 17:30	Gonçalo Oliveira	*Generalizing holomorphic bundles to almost complex 6-manifolds*
17:30 – 18:00	Tommaso Pacini	*Extremal length in higher dimensions and complex systolic inequalities*
18:00 – 18:30	Vladimir Salnikov	*Generalized geometry in physics and mechanics*

Wednesday, 31 July, Room 11.1.31

13:30 – 14:00	Mahir Bilen Can	*The Asymptotic Nilpotent Variety of G2*
14:00 – 14:30	Habib Bouzir	*Deformation of some generalized structures*
15:30	Excursion and Congress Dinner	

S.12 Harmonic Analysis and Partial Differential Equations

Organisers:
Vladimir Georgiev, Tohru Ozawa, Michael Ruzhansky, Jens Wirth

Monday, 29 July, Room 11.1.28 (split session)

14:30 – 15:00	Ljubica Oparnica	*Fractional wave equation with discontinuous coefficients*
15:00 – 15:30	Niyaz Tokmagambetov	*Very weak solutions of wave equation for Landau Hamiltonian with irregular electromagnetic field*
15:30 – 16:00	Mohammed Elamine Sebih	*On a wave equation with singular dissipation*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Ivan Pombo	*A new approach on the Calderón problem for discontinuous complex conductivities*
17:00 – 17:30	Igor Trushin	*Inverse Scattering Problems on Quantum Graphs*

Monday, 29 July, Room 11.1.30 (split session)

14:00 – 14:30	Kiyoshi Mochizuki	*Spectral theory for magnetic Schrödinger*
14:30 – 15:00	Mirko Tarulli	*Decay and Scattering in energy space for the solution of generalised Hartree equation*
15:00 – 15:30	Koichi Taniguchi	*Endpoint Strichartz estimates for Schrödinger equation on exterior domains*
15:30 – 16:00	Takahisa Inui	*The Strichartz estimates for the damped wave equation and its application to a nonlinear problem*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Piero D'Ancona	*Global almost radial solutions to supercritical dispersive equations outside the unit ball*
17:00 – 17:30	Gyeongha Hwang	*Probabilistic well-posedness of the mass-critical NLS with radial data below $\mathbb{R}^d$*

Tuesday, 30 July, Room 23.1.5

16:30 – 17:00	Nurgissa Yessirkegenov	*Hypoelliptic functional inequalities and applications*
17:00 – 17:30	Kanat Tulenov	*Optimal symmetric range for Hilbert transform and its non-commutative extensions*
17:30 – 18:00	Rúben Sousa	*Product formulas and convolutions for solutions of Sturm-Liouville equations*
18:00 – 18:30	Berikbol Torebek	*Blowing-up solutions of the time-fractional dispersive partial differential equations*

Wednesday, 31 July, Room 23.1.5

13:30 – 14:00	Tokio Matsuyama	*Energy estimate for wave equation with bounded time-dependent coefficient*
14:00 – 14:30	Chunhua Li	*On the scattering problem for the nonlinear Schrödinger equation with a potential in 2D*
14:30 – 15:00	Semyon Yakubovich	*Index transforms with the squares of Kelvin functions*
15:30	Excursion and Congress Dinner	

S.12 Harmonic Analysis and Partial Differential Equations

Organisers:
Vladimir Georgiev, Tohru Ozawa, Michael Ruzhansky, Jens Wirth,

Thursday, 1 August, Room 23.1.5

11:30 – 12:00	Annunziata Loiudice	*Asymptotic decay results for critical subelliptic equations*
12:00 – 12:30	Bolys Sabibtek	*Geometric Hardy inequalities in the half-space on stratified groups*
12:30 – 14:00	Lunch	
14:00 – 14:30	Peetta Kandy Ratnakumar	*Local smoothing of Fourier integral operators and Hermite functions*
14:30 – 15:00	Duvàn Cardona	*L^p boundedness for pseudo-multipliers associated to the harmonic oscillator*
15:00 – 15:30	Jonas Brinker	*On Kohn-Nirenberg symbols of operators on the Heisenberg group*
15:30 – 16:00	Radouan Daher	*Old and New Trends in Hausdorff Operator*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Yonggeun Cho	*Focusing energy-critical inhomogeneous NLS*
17:00 – 17:30	Hayato Miyazaki	*Strong instability for standing wave solutions to the system of the quadratic NLKG*
17:30 – 18:00	George Venkov	*Local uniqueness of ground states for generalized Choquard model*
18:00 – 18:30	Masaru Hamano	*Scattering solutions for the focusing nonlinear Schrödinger equation with a potential*

Friday, 2 August, Room 23.1.5

12:00 – 12:30	Daniele Garrisi	*Uniqueness of standing-waves solutions to the non-linear Schroedinger equations for combined power-type non-linearities*
12:30 – 13:00	Noriyoshi Fukaya	*Uniqueness and nondegeneracy of ground states for nonlinear Schrödinger equations with attractive inverse-power potential*
13:00 – 14:30	Lunch	
14:30 – 15:00	Mitsuru Sugimoto	*A trial to construct specific self-similar solutions for nonlinear wave equations*
15:00 – 15:30	Simão Correia	*Critical well-posedness for the modified Korteweg-de Vries equation and self-similar dynamics*
15:30 – 16:00	Kazumasa Fujiwara	*Remark on blow-up for the half Ginzburg-Landau-Kuramoto equation with rough coefficients*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Yi Zhou	*Global regularity for Einstein-Klein-Gordon system with $U(1) \times \mathbb{R}$ isometry group*
17:00 – 17:30	Ningan Lai	*Blow-up and lifespan estimate to a nonlinear wave equation in Schwarzschild spacetime*
17:30 – 18:00	Masahiro Ikeda	*Test function method for blow-up phenomena of semilinear wave equations and their weakly coupled systems*
18:00 – 18:30	Tomoyuki Tanaka	*Local well-posedness for higher order Benjamin-Ono type equations*

S.13 Integral Transforms and Reproducing Kernels

Organisers:
Zouhaïr Mouayn

Monday, 29 July, Room 23.3.7

14:30 – 15:00	Anabela Silva	*Convolution integral equations related to Fourier sine and cosine transforms and Hermite functions*
15:00 – 15:30	Nurlan Yerkinbayev	*Noetherian Solvability of an Operator Singular Integral Equation with Carleman Shift in Fractional Spaces*
15:30 – 16:00	Faiçal Ndairou	*Distributed-order non-local optimal control*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Rita Guerra	*Paley-Wiener and Wiener's Tauberian results for a class of oscillatory integral operators*
17:00 – 17:30	Arran Fernandez	*Models and classifications in fractional calculus*
17:30 – 18:00	Isao Ishikawa	*On the boundedness of composition operators on reproducing kernel Hilbert spaces with analytic positive definite functions*

Tuesday, 30 July, Room 23.3.4

11:30 – 12:00	El Aïdi Mohammed	*A harmonic interpolation sequence on the real unit ball*
12:00 – 12:30	Zouhaïr Mouayn	*Nonlinear coherent states associated with a measure on the positive real half line*

S.14 Partial Differential Equations on Curved Spacetimes

Organisers:
ANAHIT GALSTYAN, MAKOTO NAKAMURA, KAREN YAGDJIAN

Tuesday, 30 July, Room 23.3.14

11:30 – 12:00	Michael Gerhard Reissig	*Semilinear de Sitter model of cosmology - global existence of small data solutions*
12:00 – 12:30	Marcelo Ebert	*About critical exponents in semi-linear de Sitter models*
12:30 – 13:00	Fumihiko Hirosawa	*Energy estimates for Klein-Gordon type equations with time dependent mass*
13:00 – 14:30	Lunch	
14:30 – 15:00	Seiichiro Wakabayashi	*On the Cauchy problem for hyperbolic operators with triple characteristics whose coefficients depend only on the time variable*
15:00 – 15:30	James Vickers	*Quantum Field Theory on Low regularity Spacetimes*
15:30 – 16:00	José Natário	*Solutions of the wave equation bounded at the Big Bang*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Lavi Karp	*Continuous dependence on the geometrical initial data for the Einstein vacuum equations*
17:00 – 17:30	Uwe Brauer	*Local existence of solutions to the Euler–Poisson system, including densities without compact support*
17:30 – 18:00	Shiwu Yang	*Global solutions of massive Maxwell-Klein-Gordon equations with large Maxwell field*
18:00 – 18:30	Makoto Nakamura	*Remarks on the Navier-Stokes equations in homogeneous and isotropic spacetimes*

Thursday, 1 August, Room 23.3.14

11:30 – 12:00	Andras Vasy	*Outgoing Fredholm theory and the limiting absorption principle for asymptotically conic spaces*
12:00 – 12:30	Dean Baskin	*Radiation fields for wave equations*
12:30 – 13:00	Sergey Grigorian	*Heat Flow of Isometric G_2-structures*
13:00 – 14:30	Lunch	
14:30 – 15:00	Andras Balogh	*Computational analysis of a nonlinear wave equation with black hole embedded in an expanding universe*
15:00 – 15:30	Baoping Liu	*Asymptotic Behavior of nonlinear Schrödinger equations with radial data*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Anahit Galstyan	*Semilinear Klein-Gordon Equation in the Friedmann-Lamaitre-Robertson-Walker spacetime*
17:00 – 17:30	Karen Yagdjian	*Properties of solutions of hyperbolic equations in the curved space-times*
17:30 – 18:00	Baoxiang Wang	*Navier-Stokes equation with very rough data*

S.15 Partial Differential Equations with Nonstandard Growth

Organisers:
HERMENEGILDO BORGES DE OLIVEIRA, SERGEY SHMAREV

Tuesday, 30 July, Room 23.3.15

11:30 − 12:00	Petra Wittbold	*On a stochastic $p(\omega, t, x)$-Laplace equation*
12:00 − 12:30	Tacksun Jung	*Multiplicity results for $p-$Laplacian boundary value problem*
12:30 − 13:00	Eurica Henriques	*About some generalizations of the parabolic p-Laplacian and the Porous Medium Equation*
13:00 − 14:30	Lunch	
14:30 − 15:00	Roger Lewandowski	*About a new non linear boundary condition for the turbulent kinetic energy involved in models of turbulence*
15:00 − 15:30	Hyeong Ohk Bae	*Interior Regularity to the Steady Incompressible Shear Thinning Fluids with Non-standard Growth*
15:30 − 16:00	César J. Niche	*A survey of recent results on the characterization of decay of solutions to some dissipative equations*
16:00 − 16:30	Coffee-break	
16:30 − 17:00	Jacques Giacomoni	*Picone identity for variable exponents operators and applications*
17:00 − 17:30	Claudia Lederman	*A free boundary problem for an inhomogeneous operator with nonstandard growth*
17:30 − 18:00	Sergey Sazhenkov	*Entropy and kinetic solutions of the genuinely-nonlinear Kolmogorov-type equation with partial diffusion and nonlinear source term*
18:00 − 18:30	Hermenegildo Borges de Oliveira	*Existence results for the $p(u)-$Laplacian problem.*

Wednesday, 31 July, Room 23.3.15

14:00 − 14:30	Jorge Ferreira	*On the asymptotic behaviour of solutions of a nonlinear viscoelastic plate equation with a strong damping and $\vec{p}(x,t)-$Laplacian*
14:30 − 15:00	Sabit Igisinov	*On the continuous invertibility of a class of the mixed type differential operators in an unbounded domain*
15:30	Excursion and Congress Dinner	

S.15 Partial Differential Equations with Nonstandard Growth

Organisers:
Hermenegildo Borges de Oliveira, Sergey Shmarev

Thursday, 1 August, Room 23.3.10

11:30 – 12:00	Kirane Mokhtar	*Nonexistence results for some nonlinear nonlocal elliptic inequalities with variable exponents*
12:00 – 12:30	Pedro Marín-Rubio	*On a nonlocal viscosity p-Laplacian evolutive problem. Existence and long-time behavior*
12:30 – 13:00	Ugur Sert	*Solvability of Nonlinear Elliptic Type Equation With Two Unrelated Non standard Growths*
13:00 – 14:30	Lunch	
14:30 – 15:00	Joerg Wolf	*Sufficient conditions for local regularity to the generalized Newtonian fluid with shear thinning viscosity*
15:00 – 15:30	Nikolai V. Chemetov	*Well-posedness of the Cosserat-Bingham multi-dimensional fluid equations*
15:30 – 16:00	Fernanda Cipriano	*Optimal feedback control of second grade fluids*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	QHeung Choi	*Boundary value problem involving $p-$Laplacian and jumping nonlinearities*
17:00 – 17:30	José Carlos Matos Duque	*On the numerical simulation of a parabolic equation with p-Laplacian and memory.*
17:30 – 18:00	Gaukhar Arepova	*On a multidimensional boundary value problem for a model degenerate elliptic-parabolic equation*
18:00 – 18:30	Sergey Shmarev	*Global regularity of solutions of singular parabolic equations with nonstandard growth*

S.16 Pseudo Differential Operators

Organisers:
Shahla Molahajloo, Man Wah Wong

Monday, 29 July, Room 23.3.9

14:00 – 14:30	Gianluca Garello	*Pseudo-Differential Operators and Existence of Gabor Frames*
14:30 – 15:00	Christine Pfeuffer	*Fredholm Property of Non-Smooth Pseudodifferential Operators*
15:00 – 15:30	Alessandro Oliaro	*Paley-Wiener Theorems of real type in ultradifferentiable spaces*
15:30 – 16:00	Ivan Ivec	*Continuity of linear operators on mixed-norm Lebesgue and Sobolev spaces*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Joachim Toft	*Analytic pseudo-differential calculus via the Bargmann transform*
17:00 – 17:30	Sandro Coriasco	*Pseudo-differential operators of Gevrey type and their action on classes of modulation spaces*
17:30 – 18:00	Fernando de Ávila Silva,	*Globally Hypoelliptic operators on Manifolds and Fourier Expansion of Elliptic Operators*
18:00 – 18:30	Daniel Lorenz	*Pseudos with limited smoothness applied to strictly hyperbolic Cauchy problems with coefficients low-regular in time and space*

Tuesday, 30 July, Anf 11.1.3

16:30 – 17:00	Viorel Catană	*Two-wavelet curvelet localization operators and two-wavelet curvelet multipliers*
17:00 – 17:30	K. L. Wong	*Normality, Self-Adjointness, Spectral Invariance, Groups and Determinants of Pseudo-Differential Operators on Finite Abelian Groups*
17:30 – 18:00	Vishvesh Kumar	*C^*-algebras, H^*-algebras and trace ideals of pseudo-differential operators on locally compact, Hausdorff and abelian groups*
18:00 – 18:30	Ville Turunen	*Time-frequency analysis and pseudo-differential operators on locally compact groups*

S.17 Quaternionic and Clifford Analysis

Organisers:
SWANHILD BERNSTEIN, UWE KÄHLER, IRENE SABADINI, FRANCISCUS SOMMEN

Monday, 29 July, Room 23.1.6

14:00 – 14:30	Jeffrey Hogan	*Quaternionic splines, wavelets and prolates*
14:30 – 15:00	Peter Massopust	*Clifford-Valued Cone and Hex Splines*
15:00 – 15:30	Brigitte Forster-Heinlein	*THE commutative diagram of signal processing from a Clifford perspective*
15:30 – 16:00	Dmitrii Legatiuk	*On application of script geometry to finite element exterior calculus*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Nelson Faustino	*The discrete Cauchy-Kovalevskaya extension originating from fractional central difference operators*
17:00 – 17:30	Vladimir Bolotnikov	*Interpolation by polynomials over division rings*
17:30 – 18:00	Michael Shapiro	*Analyticity in the sense of Hausdorff and classes of hyperholomorphic quaternionic functions*
18:00 – 18:30	Daniel Alpay	*A general setting for functions of Fueter variables: differentiability, rational functions, Fock module and related topics*

Tuesday, 30 July, Room 23.1.6

11:30 – 12:00	Fabrizio Colombo	*Some applications of the Spectral Theory on the S-spectrum*
12:00 – 12:30	Heikki Orelma	*A group classification of linear fractional partial differential equation with Laplacian on a plane*
12:30 – 13:00	Ali Guzman Adan	*A distributional approach to integration over smooth surfaces of lower dimension embedded in $\mathbb{R}^m$*
13:00 – 14:30	Lunch	
14:30 – 15:00	Roman Lavicka	*Fischer decomposition in non-stable cases*
15:00 – 15:30	Sebastian Bock	*Special classes of monogenic functions and applications in linear elastic fracture mechanics*
15:30 – 16:00	Yuri Grigor'ev, Andrei Iakovlev	*Radial integration operators in infinite domains and their applications in quaternion analysis*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Guangbin Ren	*Slice Analysis of Several Variables*
17:00 – 17:30	Wei Wang	*Analysis of the k-Cauchy-Fueter complexes*
17:30 – 18:00	Riccardo Ghiloni	*Slice regular functions in several variables*
18:00 – 18:30	Lukáš Krump	*Nonstable quaternionic and orthogonal complexes for k Dirac operators*

Wednesday, 31 July, Room 23.1.6

14:00 – 14:30	Cinzia Bisi	*On Runge Pairs and Topology of Axially Symmetric Domains.*
14:30 – 15:00	Mihaela Vajiac	*Ternary Regular Functions*
15:30	Excursion and Congress Dinner	

S.17 Quaternionic and Clifford Analysis

Organisers:
SWANHILD BERNSTEIN, UWE KÄHLER, IRENE SABADINI, FRANCISCUS SOMMEN

Thursday, 1 August, Room 11.1.31 (split session)

11:30 – 12:00	Teppo Mertens	*Radon-Type transforms for holomorphic functions in the Lie ball*
12:00 – 12:30	Hu Ren	*Bargmann-Radon transform for axially monogenic functions*
12:30 – 14:00	Lunch	
14:00 – 14:30	Mathias Ionescu-Tira	*Time-Frequency Analysis in the Unit Ball*
14:30 – 15:00	Narciso Gomes	*Compressed Sensing with Slice Monogenic Signals*
15:00 – 15:30	Sirkka-Liisa Eriksson	*Hyperbolic function theory and hyperbolic Brownian motion*
15:30 – 16:00	Kamal Diki	*On the Bargmann-Fock-Fueter and Bergman-Fueter integral transforms (Joint work with Prof. Krausshar and Prof. Sabadini)*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Sören Kraußhar	*Applications of slice-holomorphic functions to automorphic forms and Bergman kernels*
17:00 – 17:30	Alessandro Perotti	*An Almansi type decomposition for slice-regular functions on Clifford algebras*
17:30 – 18:00	Caterina Stoppato	*Zeros of slice functions over dual quaternions: theory and applications*
18:00 – 18:30	Swanhild Bernstein	*A Dirac operator in infinite dimensional analysis*

Thursday, 1 August, Anf 11.1.3 (split session)

11:30 – 12:00	Wang Liping	*Some Properties and Application of Teodorescu Operators Associated with the Helmholtz Equation and the Time-harmonic Maxwell Equations*
12:00 – 12:30	Briceyda Berenice Delgado	*A right inverse operator for $curl + \lambda I$ and applications*
12:30 – 14:00	Lunch	
14:00 – 14:30	Minggang Fei	*Real Paley-Wiener Theorem for Clifford-Fourier Transfrom*
14:30 – 15:00	Haipan Shi	*Two-sided Fourier Transform in Clifford Analysis and its Application*
15:00 – 15:30	Hamed Baghal Ghaffari	*A Clifford Construction of Multidimensional Prolate Spheroidal Wave Functions*
15:30 – 16:00	Anastasiia Legatiuk	*Application of the discrete potential theory to problems of mathematical physics*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Luis Manuel Tovar Sanchez	*Dirichlet and Bloch Spaces in different Contexts*
17:00 – 17:30	Eusebio Ariza Garcia	*Sufficient Conditions for Associated Operators to a Space of Harmonic-Type functions*
17:30 – 18:00	Heju Yang	*A new Cauchy integral formula in the complex Clifford analysis*
18:00 – 18:30	Yonghong Xie	*Important Properties of Clifford Möbius Transformation and Its Application*

S.17 Quaternionic and Clifford Analysis

Organisers:
SWANHILD BERNSTEIN, UWE KÄHLER, IRENE SABADINI, FRANCISCUS SOMMEN

Friday, 2 August, Room 23.1.6

12:00 – 12:30	Maria Elena Luna-Elizarrarás	*On the structure of the singularities of bicomplex holomorphic functions*
12:30 – 13:00	Craig Nolder	*Immersions of Riemann surfaces*
13:00 – 14:30	Lunch	
14:30 – 15:00	Antonio Di Teodoro	*Sufficient Conditions for the Fractional Vekua equation to be Associated with the fractional Cauchy-Riemann operator in the Riemann-Liouville sense*
15:00 – 15:30	Yakov Krasnov	*Spectral Decomposition of Clifford algebras*
15:30 – 16:00	Dmitry Bryukhov	*GASPT, Radially Holomorphic Functions, the Fueter Potential Method in an Inhomogeneous Medium and Problems of Generalized Joukowski Transformations in $\mathbb{R}^3$*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Tomas Salac	*Domains of monogenicity in several quaternionic variables*
17:00 – 17:30	Igor Kanatchikov	*On the hypercomplex Airy function in the context of quantum Yang-Mills theory*
17:30 – 18:00	Irene Sabadini	*Multivariable quaternionic functions and power series*

S.18 Recent Progress in Evolution Equations

Organisers:
MARCELLO D'ABBICCO, MARCELO REMPEL EBERT

Monday, 29 July, Room 23.3.4

14:00 – 14:30	Massimo Gobbino	*Infinite dimensional Duffing-like evolution equations*
14:30 – 15:00	Fumihiko Hirosawa	*Some properties of time dependent propagation speed of the wave equation for the estimates of low frequency energy*
15:00 – 15:30	Alessia Ascanelli	*Decay of the data and regularity of the solution in Schrödinger equations*
15:30 – 16:00	Makoto Nakamura	*Global solutions for the semilinear diffusion equation in the de Sitter spacetime*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Giovanni Girardi	*$L^1 - L^1$ estimates for the strongly damped plate equation*
17:00 – 17:30	Wenhui Chen	*Weakly coupled systems of semilinear elastic waves with different damping mechanisms in 3D*
17:30 – 18:00	Halit Sevki Aslan	*The influence of oscillations on energy estimates for damped wave models with time-dependent propagation speed and dissipation*

Tuesday, 30 July, Room 23.3.4

14:00 – 14:30	Marco Cappiello	*Semilinear p-evolution equations in weighted Sobolev space*
14:30 – 15:00	Yuta Wakasugi	*L^p-L^q estimates for the damped wave equation and the critical exponent for the nonlinear problem with slowly decaying data*
15:00 – 15:30	Marina Ghisi	*Time-dependent propagation speed vs strong damping*
15:30 – 16:00	Hideo Nakazawa	*Some estimates of solutions of perturbed Helmholtz equations*

Wednesday, 31 July, Anf 11.1.3

13:30 – 14:00	Fabio Pusateri	*Some recent results on periodic waver waves*
14:00 – 14:30	Vladimir Georgiev	*On Traveling Solitary Waves for nonlinear Half-Wave Equations*
14:30 – 15:00	Sandra Lucente	*Blow-up for Quasi-Linear Wave Equations with time dependent potential*
15:30	Excursion and Congress Dinner	

S.18 Recent Progress in Evolution Equations

Organisers:
MARCELLO D'ABBICCO, MARCELO REMPEL EBERT

Thursday, 1 August, Room 23.3.4

11:30 – 12:00	Ruy Coimbra Charao	*Existence and asymptotic properties for dissipative semilinear second order evolution equations with fractional Laplacian operators*
12:00 – 12:30	Chiara Boiti	*Regularity of linear partial differential operators with polynomial coefficients*
12:30 – 14:00	Lunch	
14:00 – 14:30	Andrey Faminskiy	*On regularity of solutions to two-dimensional Zakharov-Kuznetsov equation*
14:30 – 15:00	Cleverson da Luz	*Sigma-evolution models with low regular time-dependent structural damping: effective and non-effective dissipation*
15:00 – 15:30	Jon Johnsen	*On a criterion for log-convex decay in non- selfadjoint dynamical systems*
15:30 – 16:00	Alessandro Palmieri	*Recent progress in semilinear wave equations in the scale-invariant case*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Jorge Marques	*Critical exponent for the semilinear damped wave equation with polynomial decaying propagation speed*
17:00 – 17:30	Tuan Anh Dao	*L^1 estimates for oscillating integrals and application to parabolic like semi-linear structurally damped σ-evolution models*
17:30 – 18:00	Mohammed Djaouti Abdelhamid	*Modified different nonlinearities for weakly coupled systems of semilinear effectively damped waves with different time-dependent coefficients in the dissipation terms*
18:00 – 18:30	Marcello D'Abbicco	*Asymptotics for a semilinear damped plate equation with time-dependent coefficients*

S.19 Spectral Theory of Partial Differential Equations

Organisers:
JAMES KENNEDY, DAVIDE BUOSO

Monday, 29 July, Room 23.3.11

14:00 – 14:30	Marcus Waurick	*Quantitative aspects for homogenisation problems in $\mathbb{R}^n$*
14:30 – 15:00	Yulia Meshkova	*On homogenization of periodic parabolic systems*
15:00 – 15:30	Maurizio Garrione	*Spectral theory for beams with intermediate piers and related nonlinear evolution problems*
15:30 – 16:00	Davide Buoso	*Semiclassical bounds for spectra of biharmonic operators*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Giuseppina di Blasio	*Some sharp spectral inequalities*
17:00 – 17:30	Michele Zaccaron	*Spectral stability for the Maxwell equations in a cavity*
17:30 – 18:00	Kordan Ospanov	*Coercive estimates for a second-order differential equation with oscillating drift*
18:00 – 18:30	Yeskabylova Zhuldyz	*Conditions of maximal regularity for a third-order differential equation with fast growing intermediate coefficients*

Wednesday, 31 July, Room 23.3.9

13:30 – 14:00	El Aïdi Mohammed	*On the negative spectrum of generalized Hamiltonians defined on metric graphs*
14:00 – 14:30	Alip Mohammed	*Eigenvalues of the Third Boundary Value Problem for the Heat Equation*
14:30 – 15:00	Tynysbek Kal'menov	*On the structure of the spectrum of regular boundary value problems for differential equations*
15:30	Excursion and Congress Dinner	

S.20 Theory and Applications of Boundary-domain Integral and Pseudodifferential Operators

Organisers:
Sergey Mikhailov, David Natroshvili

Tuesday, 30 July, Room 23.3.5

14:00 – 14:30	David Natroshvili	*Localized boundary-domain integral equations approach with piecewise constant cut-off function for the heat transfer equation with a variable coefficient*
14:30 – 15:00	Yuri Karlovich	*Mellin pseudodifferential operators with non-regular symbols and their applications*
15:00 – 15:30	Roland Duduchava	*Mixed Boundary Value Problems for an Elliptic Equation in a Lipschitz Domain*
15:30 – 16:00	Mirela Kohr	*Layer potentials and exterior boundary problems in weighted Sobolev spaces for the Stokes system with L^∞ elliptic coefficient tensor*

Thursday, 1 August, Room 23.3.9

11:30 – 12:00	Julia Orlik	*Rescaling and Trace Operators in Fractional Sobolev Spaces on Bounded Lipschitz Domains with Periodic Structure*
12:00 – 12:30	Ilya Spitkovsky	*On Toeplitz operators with matrix almost periodic symbols*
12:30 – 14:00	Lunch	
14:00 – 14:30	Vakhtang Kokilashvili	*Solution of the Riemann boundary value problem in the case when the free term belongs to the grand variable exponent Lebesgue space $L^{p(t),\theta}(\Gamma)$ when $\min_\Gamma p(t) = 1$*
14:30 – 15:00	Alexander Meskhi	*Singular integrals in weighted grand variable exponent Lebesgue spaces*
15:00 – 15:30	Vladimir Vasilyev	*On some degenerated boundary value problems*
15:30 – 16:00	Vladimir Rabinovich	*Schrödinger operators on $\mathbb{R}^n$ with interactions on unbounded hypersurfaces*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Christian Constanda	*Approximate Solution for Thin Plates in an Infinite Domain*
17:00 – 17:30	Carlos Fresneda-Portillo	*Boundary Domain Integral Equations for Diffusion Equation in Non-homogeneous Media with Dirichlet Boundary Conditions based on a New Family of Parametrices*
17:30 – 18:00	Sergey E. Mikhailov	*Analysis of Boundary-Domain Integral Equations for the Variable-Viscosity Compressible Robin-Stokes BVP in L_p-based Spaces*
18:00 – 18:30	Tsegaye Ayele	*Two-operator BDIEs for Variable-Coefficient Neumann Problem with General Data*

S.20 Theory and Applications of Boundary-domain Integral and Pseudodifferential Operators

Organisers:
Sergey Mikhailov, David Natroshvili

Friday, 2 August, Room 23.3.9

12:00 – 12:30	George Chkadua	*Dynamical interaction problems of acoustic waves and thermo-electro-magneto elastic structures*
12:30 – 13:00	Maia Mrevlishvili	*Investigation of nonclassical transmission problems of the thermo-electro-magneto elasticity theory for composed bodies by the integral equation method*
13:00 – 14:30	Lunch	
14:30 – 15:00	Lasha Baramidze	*Uniform Convergence of Double Vilenkin-Fourier Series*
15:00 – 15:30	Gvantsa Shavardenidze	*On the convergence of Cesàro means of negative order of Vilenkin-Fourier series*
15:30 – 16:00	Tsegaye Ayele	*Boundary-Domain Integral Equation systems to the Mixed BVP for Compressible Stokes Equations with Variable Viscosity in 2D*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Solomon Tesfaye Bekele	*Two-operator Boundary-Domain Integral Equations for variable coefficient Neumann boundary value problem in 2D*
17:00 – 17:30	Mulugeta Alemayehu Dagnaw	*Boundary-Domain Integral Equation Systems to the Dirichlet BVP for Stokes Equations with variable viscosity in 2D*
17:30 – 18:00	Mulugeta Alemayehu Dagnaw	*Boundary-Domain Integral Equation Systems to the Neumann BVP for a compressible Stokes System with variable viscosity in 2D*
18:00 – 18:30	Moumita Mandal	*Superconvergence of discrete Legendre spectral projection methods for Fredholm-Hammerstein integral equations*

S.21: Time-frequency Analysis and Applications

Organisers:
Luis Daniel Abreu, Peter Balazs

Monday, 29 July, Anf 11.1.3

14:00 – 15:00	Peter Balazs	*Recent Developments in Time-frequency Analysis and Applications*
15:00 – 15:30	Hans G. Feichtinger	*Current problems in Gabor Analysis*
15:30 – 16:00	Marisa Hoeschele	*Using time-frequency analysis to understand animal communication*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Nicki Holighaus	*Coorbit spaces for warped time-frequency representations*
17:00 – 17:30	Ayse Sandikci	*Continuity properties of Multilinear τ-Wigner Transform*
17:30 – 18:00	Michael Speckbacher	*Planar sets of sampling for the short-time Fourier transform - From sufficient conditions to sampling bounds on polyanalytic Fock spaces*
18:00 – 18:30	Luis Daniel Abreu	*Time-frequency analysis of signals periodic in time and in frequency*

Thursday, 1 August, Room 11.1.28

11:30 – 12:00	João Nuno Prata	*What is the Wigner function closest to a given square integrable function?*
12:00 – 12:30	Jordy Timo Van Velthoven	*Coorbit spaces associated to integrably admissible dilation groups*
12:30 – 13:00	Felix Voigtlaender	*Invertibility of frame operators on Besov-type decomposition spaces*
13:00 – 14:30	Lunch	
14:30 – 15:00	Brigitte Forster-Heinlein	*Frame Recycling*
15:00 – 15:30	Elena Ushakova	*Compactly supported linear combinations of elements of Battle–Lemarié spline wavelet systems and decompositions in weighted function spaces*
15:30 – 16:00	Wang Yanbo	*Adaptive Fourier Decomposition in H^p Spaces*

S.22 Wavelet theory and its Related Topics

Organisers:
KEIKO FUJITA, AKIRA MORIMOTO

Tuesday, 30 July, Room 23.3.7

11:30 – 12:00	Yun-Zhang Li	*The time-frequency analysis on the half space*
12:00 – 12:30	Kensuke Fujinoki	*Two-dimensional frames for multidirectional decompositions*
12:30 – 13:00	Anastasia Zakharova	*Application of frame theory to shape from defocus*
13:00 – 14:30	Lunch	
14:30 – 15:00	Neil Kristofer Dizon	*Optimization in the construction of nearly cardinal and nearly symmetric wavelets*
15:00 – 15:30	Maria Charina	*Hölder regularity of anisotropic wavelets and wavelet frames: matrix approach*
15:30 – 16:00	Keiko Fujita	*Some topics on the Gabor wavelet transformation*
16:00 – 16:30	Coffee-break	
16:30 – 17:00	Yoshihiro Aihara	*Deficiency of holomorphic curves for hypersurfaces and linear systems*
17:00 – 17:30	Li Dengfeng	*The Template-based Procedure of Biorthogonal Ternary Wavelets for Curve Multiresolution Processing*
17:30 – 18:00	Mikhail Karapetyants	*Subdivision schemes on a dyadic half-line*

S.23 Poster Session

Organisers:
N.A.

Wednesday, 31 July, Complexo Pedagógico

11:30 – 12:30		
	Chafika Amel Aitemrar	$h-$Fourier integral operators with complex phase
	Hakeem Ali	Applications on infra Beta-open (closed) sets
	Yahya Almalki	Spin Structures on p-Gonal Surfaces via Divisors
	Sami Altoum	Free Euler Lagrange Equation
	Asmae Babaya	Analytic Improvement of Frequency Characteristic of GaN-based HEMT
	Mohamed Berbiche	On the existence of global solution for a certain semilinear fractional evolution equations
	David Santiago Gómez Cobos	Harmonic Analysis and the topology of Spheres
	George Giorgobiani	On the series with an affine sum range in a Banach space
	Snežana Gordic	Colombeau generalized stochastic processes and applications
	Kamel Ali Kheli	Positive periodic solutions for delay neutral dynamic equations
	Anna Kholomeeva	Exact solutions of a nonlinear equation from the theory of nonstationary processes in semiconductors
	Liudmila Novikova	Bifurcations of invariant manifolds of nonlinear operators in Banach spaces
	Nicusor Minculete	Some refinements of Ostrowski's inequality and an extension to a 2-inner product space
	Nico Michele Schiavone	Heat-like and wave-like behaviour of the lifespan estimates for wave equations with scale invariant damping and mass
	Yi Zhu	Global solutions of 3D incompressible MHD system with mixed partial dissipation and magnetic diffusion
12:30 – 14:00	Lunch	
15:30	Excursion and Congress Dinner	