



Session 8

GENERALIZED FUNCTIONS

Organisers: M. Oberguggenberger (Innsbruck), S. Pilipović (Novi Sad)

Room

August 05 / 2013

Chairs: Oberguggenberger/Pilipović

14:30 - 14:35

Opening of Session

14:35 - 15:00

Vickers, J. Smoothing Operators, Colombeau Algebras and Generalised Differential Geometry

15:05 - 15:25

Sämman, C. The globally hyperbolic splitting in non-smooth Lorentzian manifolds

15:30 - 16:00

Coffe break

Chair: Garetto

16:00 - 16:20

Scarpalézos, D. Ideals in the ring of generalized constants with continuous parametrisation

16:25 - 16:45

Giordano, P. Generalized functions as a category of smooth set-theoretical maps

16:50 - 17:10

Nigsch, E. The functional analytic foundation of Colombeau algebras

Chair: Kunzinger

17:15 - 17:35

Rajter-Ćirić, D. Fractional derivatives of Colombeau generalized stochastic processes defined on \mathbb{R}^+

17:40 - 18:00

Erlacher, E. Ordinary differential equations in algebras of generalized functions

18:05 - 18:25

Saidi, T. Colombeau algebras of generalized functions based on Gelfand-Shilov spaces



August 06 / 2013

Chair: Pilipović

12:15 - 12:40

Vindas, J. General Stieltjes moment problems for rapidly decreasing smooth functions

12:45 - 13:05

Rakić, D. L-weighted Hölder spaces

13:05 - 14:30

Lunch break

Chair: Oberguggenberger

14:30 - 14:55

Boyadzhiev, G. Geometrical Approach to Modeling the Earth Crust and Upper Mantle

15:00 - 15:20

Kamiński, A. On the existence and growth of the convolution

15:25 - 15:45

Mincheva-Kamińska, S. On various classes of approximate units and the convolution of generalized functions

15:45 - 16:30

Coffee break and Mikusiński exhibition

Chair: Kunzinger

16:30 - 16:50

Kmit, I. Robustness of Exponential Dichotomies of Boundary-Value Problems for General First-Order Hyperbolic Systems

16:55 - 17:15

Alexeyeva, L. Shock thermoelastic waves as generalized solutions of thermoelasticity equations

17:20 - 17:40

Zakiryanova, G. Generalized and fundamental solutions of M.Biot equations for moving loads

17:45 - 18:05

Khaladi, M. T. Linear Differential Equations in the Algebra of Almost Periodic Generalized Functions

18:10 - 18:30

Kostadinova, S. Ridgelet transform and asymptotic behavior of distributions



August 08 / 2013

Joint Day with Session 17, Pseudo-differential operators

Chair: Vickers

12:15 - 12:35

Kunzinger, M. Geometric regularization on Riemannian and Lorentzian manifolds

12:40 - 13:00

Hörmann, G. Generalized functions and basic symplectic geometry

13:05 - 13:25

Vernaeve, H. Topological properties of regular generalized function algebras

13:25 - 14:30

Lunch break

Chair: Ruzhansky

14:30 - 15:00

Wong, M. W. Pseudo-Differential Operators for Weyl Transforms

15:00 - 15:30

Toft, J. Modulation Spaces, Harmonic Analysis and Pseudo-Differential Operators

15:30 - 16:00

Coffee break

Chair: Ruzhansky

15:00 - 16:30

Rodino, L. Ancestors and Birth of Pseudo-Differential Operators

16:35 - 16:55

Pilipović, S. Regularity properties of generalized functions

17:00 - 17:20

Garetto, C. Strictly and weakly hyperbolic Cauchy problems with non-regular coefficients

17:25 - 17:55

Oberguggenberger, M. Microlocal analysis in Colombeau algebras



August 09 / 2013

Chair: Rajter

12:15 - 12:40

Melnikova, I. Distribution Spaces Related to Abstract Stochastic Problems

12:45 - 13:05

Stoeva, D. Frames, General Frechet frames, and series representations

13:05 - 14:30

Lunch break

Chair: Vindas

14:30 - 14:50

Sorek, S. On Florencio-Paúl-Virués diagonal theorem

14:55 - 15:15

Lecke, A. Gelfand-Shilov type spaces through Hermite expansions

15:20 - 15:40

Antonić, N. H-distributions: an extension of H-measures

15:40 - 16:00

Coffee break

Chairs: Oberguggenberger/Pilipović

16:00 - 16:20

Wurzer, L. The Stochastic Wave Equation with an Interval Valued Parameter

16:25 - 16:45

Levajković, T. Chaos expansion method for the Skorokhod integral equation
