

THE THIRD ANNOUNCEMENT

of the

Fourth International Conference

MODERN PROBLEMS IN APPLIED MATHEMATICS

Dedicated to the
105th Anniversary of I. Javakhishvili Tbilisi State University (TSU) &
55th Anniversary of I. Vekua Institute of Applied Mathematics (VIAM TSU)

The Conference will be held in TSU on September, 13-15, 2023

ORGANIZERS

I. Javakhishvili Tbilisi State University
I. Vekua Institute of Applied Mathematics of TSU
Tbilisi International Centre of Mathematics and Informatics (TICMI)
Georgian National Committee of Theoretical and Applied Mechanics

INTERNATIONAL SCIENTIFIC COMMITTEE

George Jaiani (Chair, Georgia), Holm Altenbach (Germany), Gia Avalishvili (Georgia) Ayeche Benjeddou (France), Natalia Chinchaladze (Georgia), Alberto Cialdea (Italy), Teimuraz Davitashvili (Georgia), Temur Jangveladze (Georgia), Reinhold Kienzler (Germany), Flavia Lanzara (Italy), Wolfgang H. Muller (Germany), Elizbar Nadaraia (Georgia), David Natroshvili (Georgia), Paolo Emilio Ricci (Italy), Mikheil Rukhaia (Georgia), Tamaz Vashakmadze (Georgia), Bakur Gulua (Scientific Secretary)

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Natalia Chinchaladze (chair), Nikoloz Avazashvili, Lasha Baramidze, Bakur Gulua, George Rukhaia, Maia Svanadze, Manana Tevdoradze

SPONSOR



Shota Rustaveli National Science Foundation of Georgia

Topics of the Conference:

- Mathematical problems of mechanics of continua and related problems of analysis
- Mathematical modeling and numerical mathematics
- Discrete mathematics and theory of algorithms

- Probability theory and mathematical statistics

PROCEEDINGS

Proceedings will be published later in Lecture Notes of TICMI

OPENNING TALKS

George Jaiani (Georgia). I. Vekua Institute of Applied Mathematics of TSU – 55

Omar Purtukhia, Tamaz Tadumadze (Georgia). Mathematics in TSU since foundation

OPENNING LECTURE

Ayech Benjeddou (France). *Nonlinear frequency- and field-dependent operational non-linearities of soft piezoceramics d15 shear response-mode*

CLOSING LECTURE

Alexander Meskhi (Georgia). *Duality, interpolation and extrapolation for weighted grand Morrey spaces*

PROGRAMM

Wednesday, September 13

TSU, Main Building, 1 Chavchavadze ave.

12:20-12:55	David Natroshvili (Georgia) Application of the Ppotential Method in the Theory of Elasticity
12:55-13:30	Holm Altenbach , Lidiia Nazarenko (Germany) Variational Principles in Coupled Strain Gradient Elasticity
13:30-13:55	Giorgi Buzghulashvili , Tamaz Vashakmadze(Georgia) To the Approximate Solution of Boundary Value Problems for Ordinary Differential Equation
13:55-14:55	Lunch
14:55-15:30	Paolo Emilio Ricci (Italy), Diego Caratelli (The Netherlands), Pierpaolo Natalini (Italy) Analytic Solution to Functional Differential Equations Via Bell's Polynomials
15:30-16:05	Vakhtang Kvaratskhelia , Giorgi Giorgobiani, Vazha Tarieladze (Georgia) Subgaussian Random Elements in Infinite Dimensional Spaces
16:05-16:30	George Rukhaia , Teimuraz Davitashvili (Georgia) Exploring the Possibilities of Using Renewable Energy in Georgia in the Context of Climate Change Issues
16:30-16:50	Coffee Break
16:50-17:25	Reinhold Kienzler (Germany) Dimension Reduction in Elasticity
17:25-18:00	Gia Avalishvili , Mariam Avalishvili (Georgia) On Nonclassical Dynamic Two-dimensional Models for Thermoelastic Shells with Three Phase-lags
18:00-18:25	Zurab Vashakidze , Jemal Rogava (Georgia) On Convergence of a Three-Layer Semi-Discrete Scheme for the Nonlinear Dynamic String Equation of Kirchhoff-Type with Time-Dependent Coefficients

Thursday, September 14

VIAM TSU, 11 University street

TIME	Sectional Talks
11:00-11:25	Ani Ozbetelashvili (Georgia) Hardy-Littlewood Maximal Function on Locally Compact Abelian Groups
11:25-11:50	Archil Papukashvili (Georgia) About the Numerical Solutions of Two Nonlinear Integro-Differential Equations
11:50-12:15	Roman Koplataдзе (Georgia) On Asymptotic Behavior of Solutions of Higher Order Emden-Fowler Type Difference Equations with Deviating Argument
12:15-12:40	Bakur Gulua , Roman Janjgava, Guranda Charkseliani (Georgia) On Construction of General Solutions of Equations of the Plane Theory of Elasticity in the Coupled Theory of Double-Porosity Materials
12:40-13:05	Gvantsa Shevardeniძე (Georgia) On the Convergence of Cesàro Means of Negative Order of Vilenkin-Fourier Series
13:05-13:25	Coffee Break
13:25-13:50	Mariam Kokhreidze (Georgia) Construction of Mathematical Models for Reiner Elastic Materials
13:50-14:15	Giorgi Geladze , Archil Papukashvili, Meri Sharikadze (Georgia) Further Exploration of the Mesoscale Atmospheric Boundary Layer
14:15-14:40	Varden Tsutskiridze (GTU, Georgia), M. Tsutskiridze (Grenoble University, France) Heat Transfer with the Flow of Conducting Fluid in Circular Pipes with Finite Conductivity under Uniform Transverse Magnetic field
14:40-15:05	Besik Tabatadze , Mikheil Gagoshidze, Temur Jangveladze (Georgia), Zurab Kiguradze (USA) Two Methods of the Numerical Solution of One System of Nonlinear Partial Differential Equations
15:05-15:30	Gogi Kejeradze (Georgia). Some Issue on the Summability of the General Dirichlet's Integrals

Excursion and Conference Dinner in Asureti

Friday, September 15

TSU, Main Building, 1 Chavchavadze ave.

TIME	
10:00-10:35	Wolfgang H. Müller (Germany) Electrodynamics and Rational Mechanics
10:35-11:10	Lucian Beznea (Romania) Multiplicative L^p -Semigroups and Continuous Flows
	<i>Parallel Sessions</i>
	Session 1
11:15-11:40	Tea Shavadze , Tamaz Tadumadze (Georgia) On the Representation Formula of Solution for a Class of Perturbed Controlled Neutral Functional-Differential Equation
11:40-12:05	Lasha Baramidze , Ushangi Goginava (Georgia) Summability of Tkebuchava's Means of One and Two Dimensional Trigonometric Fourier Series
	Session 2

11:15-11:40	Petre Babilua , Elizbar Nadaraia (Georgia) On the Testing Hypothesis of Equality of Two Bernoulli Regression Functions
11:40-12:05	Nino Manjavidze , George Makatsaria (Georgia) Functional Properties of the Solutions of Some Classes of Two-Dimensional Elliptic Systems
12:05-12:20	Coffee Break
12:20-12:55	Flavia Lanzara (Italy) Approximation of Multidimensional Fractional Laplacian Based on Gaussians
12:55-13:30	Merab Svanadze (Georgia) On the Coupled Linear Theory of Thermoelastic Nanoporous Materials with Triple Porosity
13:30-14:05	Vladimir Mityushev (Poland) Effective Properties of Dispersed Regular and Random Composites
14:05-15:00	Lunch
	<i>Parallel Sessions</i>
	Session 1
15:00-15:25	Maia Svanadze (Georgia) Problems of Steady Vibrations in the Linear Coupled Theory of Thermoviscoelasticity of Porous Materials
15:25-15:50	David Kaladze (Georgia) On the Exact Solutions of the Gardner Equations Via Tanh-Coth Method
15:50-16:15	Omar Kikvidze (Georgia) Numerical Analysis of the Equation of Motion of a Thick-Walled Pipe During Axisymmetric Deformation
	Session 2
15:00-15:25	Giorgi Kakulashvili (Georgia) On Schwarz-Christoffel Mapping of n -gon
15:25-15:50	Irakli Sikharulidze (Georgia) Sheaf-theoretic Approach to the Theory of Pseudoanalytic Functions
15:50-16:15	Mariam Chakhoiantsi (Georgia) Riemann-Hilbert Boundary Value Problem with a Shift for Generalized Analytic Functions
16:15-16:30	Coffee Break
16:30-16:55	George Jaiani , Natalia Chinchaladze (Georgia) Zero Approximation of Hierarchical Models for Fluids in Pipes of Angular Cross-Sections
16:55-17:30	Alberto Cialdea (Italy). The Functional Dissipativity of Certain Systems of Partial Differential Equations

For More Information Please Contact to the Secretariat of the Conference

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