

SECOND 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)

LOCAL ORGANIZING COMMITTEE

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

FORMAT AND STRUCTURE

Opening and Closing talks will be scheduled for 40 minutes, invited talks and sectional talks are planned. Generous time will be scheduled at refreshment breaks and social events, in order to maximize the scientific interaction and intellectual exchange between participants. The electronic version of the abstracts of all accepted presentations will be available on the web-page:

<http://viam.science.tsu.ge/mpam2023/>

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*

INVITED TALKS (UPTO 20.08.2023)

Holm Altenbach (Germany). *Variational principles in coupled strain gradient elasticity*

Gia Avalishvili (Georgia). *On Nonclassical Dynamic Two-dimensional Models for Thermoelastic Shells with Three Phase-lags*

Lucean Beznea (Romania). *Multiplicative L^p -Semigroups and Continuous Flows*

Alberto Cialdea (Italy). *The functional dissipativity of certain systems of partial differential equations*

Reinhold Kienzler (Germany). *Dimension reduction in elasticity*

Vakhtang Kvaratskhelia (Georgia). *Subgaussian Random Elements in Infinite Dimensional Spaces*

Wolfgang H. Müller (Germany). *Electrodynamics and Rational Mechanics*

Flavia Lanzara (Italy). *Approximation of multidimensional fractional Laplacian based on Gaussians*

Alexander Meskhi (Georgia). *Duality, Interpolation and Extrapolation for Weighted Grand Morrey Spaces*

Vladimir Mityushev (Poland). *Effective Properties of Dispersed Regular and Random Composites*

David Natroshvili (Georgia). *Application of the potential method in the theory of elasticity*

Paolo Emilio Ricci (Italy). *Analytic Solution to Functional Differential Equations Via Bell's Polynomials*

Merab Svanadze (Georgia). *On the Coupled Linear Theory of Thermoelastic Nanoporous Materials with Triple Porosity*

Excursion & Banquet for Participants

Excursion will be organized on September 14

Tsalka (Dashbashi) Canyon

Tsalka (Dashbashi) Canyon Natural Monument is a canyon carved by Ktsia (Khrami) River in the stream bed cut through the volcanogenic rocks of Dashbashi volcanic plateau, distinguished by its rarity and biodiversity. It is located at 1,110-1,448 m above sea level. Here you can also see (if you wish) a 240-meter long glass bridge over the canyon, with a diamond-shaped café in the middle. We will have a coffee stop close to the canyon.

On the way to Tbilisi we will have dinner at the restaurant located in village Asureti. It is an old Georgian village, which was destroyed by invasions in the 18th century. In the 20s of the XIX century, German colonists were settled here by Tsarist Russia in the village and created a German colony – Elizabettali, as a pillar of its policy. The village was called “Elizabettali” until the beginning of XX century and later it got its original name - Asureti. You will meet the German architecture here. Also, there are the remains of the German church, built in 1871. There is a cemetery for Germans. The German settlement was here until 1941, and later Stalin ordered to deport Germans from Georgia and they settled the village with people from Ambrolauri and Oni.



For More Information Please Contact to the Secretariat of the Conference

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