

PROGRAM

of The Second International Conference on
Application of Mathematics and Informatics in Natural Sciences and Engineering

Dedicated to the Centenary of Andro Bitsadze

Ilia Vekua Institute of Applied Mathematics of Ivane Javakhishvili Tbilisi State University

21-23 September, 2016

September 21

12:00-13:45 — Registration

Ilia Vekua Lecture Hall

14:00 — Opening

Darejan Tvaltvadze, Acting Rector of I. Javakhishvili Tbilisi State University

George Jaiani, Director of I. Vekua Institute of Applied Mathematics

Handing Diploma of Doctor Honoris Causa of I. Vekua Institute of Applied Mathematics to
Holm Altenbach, Professor of Otto-von-Guericke-University Magdeburg

14:15-14:45 — Sergo Kharibegashvili, *Life and Scientific Activities of Academician Andria Bitsadze*

14:50-15:20 — Holm Altenbach (Germany), *Continuum Mechanics – Basics and New Applications*

15:25-15:45 — **Coffee Break**

Ilia Vekua Lecture Hall

15:45-16:15 — Tynysbek Kalmenov, Gaukhar Arepova (Kazakhstan), *The Boundary Conditions of Bitsadze-Samarskiy for Elliptic-Parabolic Potential*

16:20-16:50 — Tamaz Vashakmadze, *To the Refined Theories for Thin-Walled Structures*

16:55-17:15 — M. Jenaliyev, M. Kosmakova, M. Ramazanov (Kazakhstan), *On a Singular Integral Equation of the Heat Conductivity Theory in Infinite Degenerating Domain*

17:20-17:45 — Zurab Kiguradze, Temur Jangveladze, *Stabilization of Solution and Discrete Analogs for One Nonlinear Integro-Differential Equation Based on Maxwell System*

17:50-18:10 — Nurgul Orumbayeva, Sagyndyk Iskakov (Kazakhstan), *On a Method of Finding a Solution of Semi-Periodic Boundary Value Problem for Hyperbolic Equations*

September 22

Ilia Vekua Lecture Hall

14:00-14:30 — Vakhtang Kokilashvili, *Grand Function Spaces and Boundary Value Problems*

14:35-15:05 — Alexander Kharazishvili, *On simple polyhedrons and associated triangulations*

15:10-15:40 — Tengiz Buchukuri, Roland Duduchava, George Tephnadze, *Laplace-Beltrami Equation on Hypersurfaces and Γ -convergence*

15:45-16:15 — **Coffee Break**

Ilia Vekua Lecture Hall

16:15-16:35 — Jemal Peradze, Givi Berikelashvili, *Approximate Solution of a Nonlinear Beam Equation*

16:40-16:45 — **Correspondence Talk**

Roland Etienne (Germany), *A Matrix Laplacian for Fractal Strings: Generalised Trigonometric Functions as Limits of Recurrence Relations II*

20:00 — Dinner at the Restaurant Tsiskvili, address: Beliashvili str, Tbilisi, Georgia.

September 23

10:00 — Excursion to Dmanisi, visit of Dmanisi Museum-Reserve of the Georgian National Museum; starting from I.Vekua Institute of Applied Mathematics, University str. 2, Tbilisi, Georgia.

Ilia Vekua Lecture Hall

14:00-14:20 — Omari Kikvidze, *Investigation of Technological Processes by Partial Differential Equations*

14:25-14:45 — Omari Kikvidze, Gerontiy Sakhvadze, *Modeling of Head-on Collision Between Stress Waves Induced in Ti-6Al-4V Alloy Plate by Two Sided Laser Shock Processing*

14:50-15:10 — Archil Papukashvili, *The Numerical Solution of a Two-Point Boundary Value Problem with a Non-Constant Coefficient by Means of Operator Interpolation Method*

15:15-15:40 — **Coffee Break**

Ilia Vekua Lecture Hall

15:40-16:00 — Natela Zirakashvili, *Exact Solution of Exterior Boundary Value Problems of Elasticity in Parabolic Coordinate System*

16:05-16:25 — Giorgi Geladze, *Numerical Modeling of Some Mesometeorological Processes of the Atmosphere*

16:30-16:50 — Gogi Pantsulaia, Givi Giorgadze, *On a Linear Partial Differential Equation of the Higher Order in Two Variables with Initial Condition whose Coefficients are Real-Valued Simple Functions*

16:55-17:15 — Konstantine Pkhakadze, Merab Chikvinidze, George Chichua, David Kurtshalia, *The First Trial Versions of the Automatically Systems of Generating and Testing of the Solving Skills of the Georgian Logical Tasks and Analogies with Voice-Managed Tools*

17:20-17:40 — Zviad Tsiklauri, *Approximate Solution of a Nonlinear Integro-Differential Beam Equation*

Abstracts of the Conference are available on web-page:

<http://www.viam.science.tsu.ge/conferences/bitsadze100>