

**Enlarged Sessions of the Seminar of I. Vekua Institute  
of Applied Mathematics**

**Section of Computing Mathematics and Mathematical Modeling**

*(Section Head - Professor David Gordeziani  
Scientific Secretary - Professor Teimuraz Davitashvili)*

26 April, 2006

Head of session Prof. T. Davitashvili

$11^{00} - 11^{20}$ . **Vashakmadze T., Manelidze G., Papukashvili T.** (TSU, Georgia) On Application of Alternating to Perturbation Techniques Method to Linear Boundary Problems.

$11^{25} - 11^{45}$ . **Vashakmadze T., Kusradze N., Manelidze G., Chikashua R.** (TSU, Georgia) On Application of Alternating to Perturbation Techniques Method to Linear Algebraic Systems of Equations.

$11^{50} - 12^{10}$ . **Peradze J.** (TSU, Georgia) Approximation of a Local Solution of the Kirchhoff String Equation.

$12^{15} - 12^{35}$ . **Komurjishvili O., Khomeriki N.** (VIAM, MICM, Georgia) On a Difference Scheme for Solution of Systems of Equations of Dynamical Multidimensional Problems of the Elasticity Theory and Shell Theory.

$12^{40} - 13^{00}$ . **Komurjishvili O., Davitashvili T., Gunava G.** (VIAM, Georgia) On Numerical Schemes of the Nonlinear Parabolic Type Equation Describing Fluid Filtration in Soil.

$13^{05} - 13^{25}$ . **Zirakashvili N.** (VIAM, Georgia) Numerical Solutions of Some Boundary-Value Problems of Theory of Elasticity by Boundary Element Method.

Head of session Prof. J. Rogava

$14^{00} - 14^{20}$ . **Khvedelidze Z., Davitashvili T., Samkharadze I.** (TSU, VIAM, Georgia) Investigation of Features of Aero and Hydro-Dynamic Flows in a Narrow Channel in View of the Relief of Bottom.

$14^{25} - 14^{45}$ . **Sharikadze J.** (TSU, Georgia) Multiple Parameter Method in Boundary Layer Theory of Variable Conducting Fluid with Suction and Heat Transfer.

$14^{50} - 15^{10}$ . **Kobadze N., Sharikadze J.** (TSU, Georgia) Asymptotics Solutions of One Similar Problem of Boundary Layer of Conducting Fluid with Suction and Heat Transfer.

$15^{15} - 15^{35}$ . **Geladze G., Davitashvili T., Skhirtladze N., Gunava G.** (VIAM, TSU, Georgia) About the Numerical Model of Clouds by Taking into Account of Some Additional Moments of Solar Radiation.

$15^{40} - 16^{00}$ . **Geladze G., Davitashvili T., Skhirtladze N., Gunava G.** (VIAM, TSU, Georgia) The Numerical Model of Clouds by Taking into Account of Microphysics Elements.

$16^{05} - 16^{25}$ . **Tavkhelidze I., Ricci P., Casiza K., Tsiskaridze A.** (VIAM, Georgia, University of Rome "La Sapienza", Italy) On the Classification of One Class of Moving Geometrical Bodies, Surfaces and Lines.

$16^{30} - 16^{50}$ . **Tavkhelidze I., Abesadze T., Avazashvili N., Nakashidze M.** (VIAM, Georgia) On Some Properties of Bodies and Surfaces of the Generalized Moebius Listing.

27 April, 2006

Head of session Prof. David Gordeziani

$10^{00} - 10^{20}$ . **Davitashvili T., Samkharadze I., Gunava G., Geladze G., Dikhaminjia N.** (VIAM, Georgia) On One 3D Numerical Model of Harmful Substances Transfer with Account of Composite Orography.

$10^{25} - 10^{45}$ . **Devdariani G., Gubelidze G.** (VIAM, Georgia) On Hydraulics Calculus of the Main Pipe-line or a Base of the Non-linear Model.

$10^{50} - 11^{10}$ . **Antidze J., Mishelashvili D., Nukradze L.** (VIAM, TSU, Georgia) System of Computer Morphological Analysis of Georgian Language.

$11^{15} - 11^{35}$ . **Davitashvili T., Geladze G., Dikhaminjia N.** (VIAM, Georgia) Mathematical Modeling of Soil Pollution by Oil for Urban Conditions.

$11^{40} - 12^{00}$ . **Lomtadze T., Rogava J., Tsiklauri M.** (TSU, VIAM, Georgia) On Approximate Solution of Cauchy Problem for Abstract Hyperbolic Equation for Sine and Cosine Operator Functions using Rational Approximation.

$12^{05} - 12^{25}$ . **Rogava J., Tsiklauri M.** (VIAM, Georgia) Decomposition Formulas for Sine and Cosine Operator Functions.

$12^{30} - 12^{50}$ . **Davitashvili T., Gunava G., Geladze G., Dikhaminjia N.** (VIAM, Georgia) On One Numerical 3D Model of Soil Pollution by Oil under High Pressure.

$12^{55} - 13^{15}$ . **Chigladze R.** (TSU, Georgia) Electropolarimetric Investigation of Jupiters Galilean Satellites.

$13^{20} - 13^{40}$ . **Chigladze R.** (TSU, Georgia) One Hypothesis about Jupiters Galilean Satellites.

$13^{45} - 14^{05}$ . **Andreev A., Chalidze A.** (Russian State Institute of Open Education, Russia; VIAM, Georgia) Distance Education: the Condition and Problems.

$14^{10} - 14^{30}$ . **Babilua P., Bokuchava I., Dochviri N., Shashiashvili M.** (TSU, Georgia) On the Problem of Convergence of Costs.

$14^{35} - 14^{55}$ . **Zirakishvili N., Janjgava R., Mosia M., Narmania M.** (VIAM, Georgia) An Application of the Boundary Elements Method for Solving of the Boundary Value Problems for Binary Mixtures.

$15^{00} - 15^{20}$ . **Zarnadze D., Ugulava D.** (MICM, Georgia) On the Application of

Ritz's Extended Method for Some Ill-posed Problems.

15<sup>25</sup> – 15<sup>45</sup>. **Avalishvili G., Avalishvili M.** (VIAM, Georgia) On One Space Numerical Problem for Two-component Elastic Mixture

15<sup>50</sup> – 16<sup>10</sup>. **Gordeziani D.** (VIAM, Georgia) On One Initial-Boundary Value Problem of a New Type.

16<sup>15</sup> – 16<sup>35</sup>. **Gordeziani E., Datoli J.** (VIAM, Georgia; FIS-MAT Unit, ENEA Frascati, Rome Italy) On Solution of Cauchy Problem for One First Order Partial-Differential Equation.

16<sup>40</sup> – 17<sup>00</sup>. **Abuladze T., Babilua P., Dochviri B., Shashiashvili M.** (TSU, Georgia) On the Modeling of the European Option Pricing Theory.