

*INTERNATIONAL CONFERENCE ON COMPLEX ANALYSIS  
AND POTENTIAL THEORY*



**Gebze Institute  
of Technology**

***ICCAPT-2006***

**September 8-14, 2006, Gebze, Turkey**



**International Congress  
of Mathematicians 2006**

***Programme***

**September 8**

12.00 – 19.00 **Arrival and Registration of Participants**

19.00 – 22.00 **Get together**

**September 9**

08.00 – 09.00 **Registration of Participants**

09.00 - 09.45 **Opening**

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**Plenary Session**

**Chairman - T. Aliyev Azeroğlu**

09.45 O. Martio, **Boundary Behavior of PWB–Solutions in the Borderline Case**

10.30 **Break**

**Plenary Session**

**Chairman - B. Bojarski**

11.00 V. Maz'ya, **Unsolved Mysteries of Solutions to PDEs near the Boundary**

11.45 H. Begehr, **Polyharmonic Dirichlet Problems**

12.30 **Lunch**

**Session 1**

**Chairman - C. C. Yang**

14.00 M. Vuorinen, **Generalized Convexity and Inequalities**

14.25 V. Starkov and P. Liczberski, **On Locally Biholomorphic Mappings from Multi-Connected onto Simply Connected Domains**

14.50 S. Morosawa, **Dynamics of Error Functions**

15.15 S. Favorov, **Almost Elliptic Functions in the sense of Sunyer-i-Balager**

15.40 **Break**

**Session 2**

**Chairman - H. Hedenmalm**

16.10 M. Karayev, **On Invertibility of Operators on the Model Space**

16.35 M. Cristea, **Mappings with Bounded Dilatation**

17.00 K. Yoshino, **The Relation among Shannon's sampling theorem, Ramanujan's integral formula and Planar's summation formula**

17.25 S. Plaksa, **Axial-Symmetric Potentials and Algebras of Analytic Functions**

18.00 – 22.00            **Reception**

**September 10**

**Plenary Session**

**Chairman - R. Kuhnau**

09.00 S. Krushkal, **Strengthened Moser's Conjecture and Finsler Geometry of Grunsky Coefficients**

09.45 H. Hedenmalm, **The Jones-Makarov Theorem for Complex Powers**

10.30 **Break**

**Plenary Session**

**Chairman - V. Maz'ya**

11.00 C. C. Yang, **Admissible Solutions of Functional Equations of Diophantine Type**

11.45 L. Aizenberg, **A Generalization of Results on the Bohr Radius**

12.10 A. Fernández Arias, **Applications of  $\Gamma$  - lines to Complex Differential Equations**

12.35 **Lunch**

**Session 1**

**Chairman - H. Shiga**

14.00 T. Shaposhnikova, **Harmonic Potentials Theory in Besov Spaces for Lipschitz Domains**

14.25 A. Pokrovskii, **Removable Singularities for Solutions to Linear Elliptic Equations of Second Order**

14.50 K. Yoshino and Y. Oka, **Asymptotic Expansions of the Solutions to the Heat Equations with Exponential Growth**

15.15 A. Benyaiche, **On Potential Theory Associated to a Coupled PDE**

15.40 **Break**

**Session 2**

**Chairman - V. Miklyukov**

16.10 J. Riihentaus, **Quasi-Nearly Subharmonic Functions, Properties and Boundary Behavior**

16.35 T. Aliyev Azeroglu, **Contour-solid theorems for finely meromorphic functions taking into account nonunivalence**

17.00 O. Karupu, **On Properties of Moduli of Smoothness of Conformal Mapping**

17.25 J. Vasileva, **Riemann Boundary Value Problem on an Open Jordan Rectifiable Curve**

**September 11**

09.00-09.45 **The lecture must go on. To the memory of Lars Inge Hedberg who intended to deliver an address at this conference**

**Plenary Session**

**Chairman - S. Krushkal**

09.45 R. Kuhnau, **Grunsky Inequalities, Fredholm Eigenvalues, Reflection Coefficients**

10.30 **Break**

**Plenary Session**

**Chairman - B. Dittmar**

11.00 V. Miklyukov, **Speed of Approximation to Degenerate Quasiconformal Mappings and Stability Problems**

11.45 H. Shiga, **Conformal Mappings of Invariant Components of Kleinian Groups**

12.35 **Lunch**

**Session 1**

**Chairman - M. Lanza De Cristoforis**

14.00 F. G. Abdullayev and M. Küçükaslan, **New Extremal Polynomials and Their Approximation Properties**

14.25 E. Malinnikova, **Runge Approximation and Mittag-Leffler Theorems for Harmonic Differential Forms on Riemannian Manifolds**

14.50 D. Israfilov, **Approximation Properties of the Bieberbach Polynomials on the Complex Domains**

15.15 Sh. Rezapour, **Effective Sets and Approximation**

15.40 **Break**

**Session 2**

**Chairman – A. Fernández Arias**

16.10 O. Gerus, **On Boundary Properties of Metaharmonic Potentials**

16.35 A. Goldberg, **Geometric Principles in the Theory of Generalized Quasiconformal Mappings**

17.00 I. V. Zhuravlev, **An Implicit Function Theorem for Sobolev Mappings**

17.25 A. Pogoruy, **On the Set of Zeroes of Bicomplex Polynomials**

17.50-18.50 **Poster Session**

Bulent N. Ornek, **On Schwarz Lemma at the Boundary**

G. Kohr, P. Curt, M. Kohr, **New Contributions in the Theory of Loewner Chains in Several Complex Variables**

M. Kohr, **New Contributions in the Potential Theory for the Stokes Resolvent System Applications**

P. Curt and G. Kohr, **Quasiconformal Extension of Biholomorphic Mappings in Several Complex Variables**

D. Mabrouk, **Multiples Suppression Using Nonlinear Filtering (t, p) Domain**

M. Acikgoz and Sh. Rezapour, **Some Results About Best and 2-best Approximation in 2-Banach Spaces**

M. Mateljevic, **Distortion of harmonic functions and harmonic quasiconformal quasi-isometry**

A. Sirma, **A note on the modified Crank-Nicholson difference schemes for Schrödinger**

A. Laouar and A. Guerziz, **The passage of long waves above a vertical barrier: method of complex variable for calculation of local disturbances**

**September 12**

9.00 **Excursion to Istanbul**

18.00-23.00 **Bosphorus Tour and Conference Dinner in the yacht**

**September 13**

**Plenary Session**

**Chairman O. Martio**

9.00 P. Tamrazov, **Tchebotaröv's problem and Grötzsch's problem**

9.45 B. Bojarski, **The General Beltrami Equations in the Complex Plane**

10.30 **Break**

**Plenary Session**

**Chairman - H. Begehr**

11.00 B. Dittmar, **Sums of Reciprocal Eigenvalues**

11.45 M. Lanza De Cristoforis, **Singular Perturbation Problems in Potential Theory and Applications**

12.10 A. Gadjev, **On approximation properties of a family of Riesz-Bessel parabolic potentials**

12.35 **Lunch**

**Session 1**

**Chairman - L. Aizenberg**

14.00 Y. Zelinskii, **Combinatorial Theorems of Complex Analysis**

14.25 A. Aytuna, **On Stein Manifolds  $M$  for which  $O(M)$  is Isomorphic to  $O(C^d)$  as Fréchet Spaces**

14.50 V. Zakharyuta, **LH-Potential Theory and Harmonic Functions**

15.15 H.T. Kaptanoglu, **Toeplitz Operators on Arveson and Dirichlet Spaces**

**Session 2**

**Chairman - J. Riihentaus**

16.10 E. Liflyand and A. Lerner, **Hausdorff Operators**

16.35 A. Targonskii, **Extremal Problems of the Univalent Theory Functions**

17.00 C. Yakar, **Strict Stability Criteria of Perturbed Systems with Respect to Unperturbed Systems in Term of Initial Time Difference**

17.25 P. Chern and P. Lappan, **On the Value Distribution of Normal Functions**

**September 14**

**Departure of participants**