

The XI<sup>th</sup> Romanian-Finnish Seminar  
*Alba Iulia, Romania, August 14–19, 2008*

**PROGRAM**

**Thursday, August 14<sup>th</sup>, 2008**

- 14:45–15:15 *Opening Ceremony* Welcome message: **Ioan Achim Moise**,  
Rector of "1 Decembrie 1918" University of Alba Iulia  
Address of **Marius Iosifescu**,  
Vice-President of the Romanian Academy
- 15:15–16:00 **Olli Martio** Quasiminimizers - calculus of variation and potential theory
- Coffee**
- 16:25–17:10 **Zoltan Balogh** Gromov's dimension comparison and fractal geometry on  
Carnot groups
- 17:15–18:00 **Vlad Marković** Biholomorphic maps between Teichmüller spaces
- 18:05–18:50 **Mihai Pascu** On a conjecture of Laugesen and Morpurgo

**20:30      Opening Reception**

## Friday, August 15<sup>th</sup>, 2008

09:00–09:45	<b>Vladimir Ryazanov</b>	Moduli in the modern mapping theory
09:55–10:40	<b>Heinrich Begehr</b>	Polyharmonic Green functions and boundary value problems

### Coffee

11:05–11:50	<b>Kohur GowriSankaran</b>	Multiply superharmonic functions: a consequence of Bocher theorem
12:00–12:45	<b>Pertti Mattila</b>	Removable sets of Lipschitz harmonic functions and singular integrals

### Lunch

15:00–15:45	<b>Anton Thalmaier</b>	Brownian motion on Jordan curves and stochastic analysis on the diffeomorphism group of the circle
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### Coffee

## Section 1A

### Analytic functions of one complex variable: Univalence

16:10–16:55	<b>Gabriela Kohr</b>	Subordination chains and generalized parametric representation in several complex variables
17:05–17:50	<b>Petru T. Mocanu</b>	On a subclass of starlike functions with bounded turning
18:00–18:30	<b>Teodor Bulboacă</b>	Modified integral operators preserving double subordinations
18:40–19:10	<b>Adriana Cătaș</b>	Differential sandwich theorems for certain subclasses of analytic functions involving multiplier transformations
19:20–19:50	<b>Alina Alb-Lupaș</b>	Certain differential subordinations using Sălăgean and Ruscheweyh operators

## Section 1B

### Analytic functions of one complex variable: Other subjects

16:10–16:55	<b>Rauno Aulaskari</b>	On $\alpha$ -normal and $\alpha$ -Yosida functions
17:05–17:50	<b>Ilie Bârză</b>	One way to look at analysis on non orientable surfaces
18:00–18:30	<b>Carmen Boloşteanu</b>	The Hilbert-Riemann problem on the Möbius strip

## Section 2

### Quasiconformal mappings and Teichmüller spaces

16:10–16:55	<b>Jang-Mei Wu</b>	On manifolds with a quasiconformal structure of small dilatation
17:05–17:50	<b>Melkana Brakalova</b>	Conformality of a $\mu$ -homeomorphism at a point
18:00–18:45	<b>Peter A. Hastö</b>	Gromov hyperbolic equivalence of the hyperbolic and quasihyperbolic metrics in Denjoy domains
18:55–19:25	<b>Riku Klén</b>	On hyperbolic type metrics

## Section 3

### Several complex variables

16:10–16:55	<b>Tejinder Neelon</b>	Restrictions of formal power series and infinitely differentiable functions to algebraic surfaces
17:05–17:50	<b>Romi Shamoyan</b>	On some inequalities for multifunctional Bergman, Hardy, Bloch and BMOA classes in higher dimension and some new spaces for holomorphic functions in the unit ball
18:00–18:45	<b>Andrei Baran</b>	The dualizing complex revisited

## Section 4

### Potential theory

16:10–16:55	<b>Gheorghe Bucur</b>	Resistance forms on a set, I
17:05–17:50	<b>Nicu Boboc</b>	Resistance forms on a set, II
18:00–18:30	<b>Khaled Kefi</b>	Comparison between the Mountain Pass theorem and the Ekeland’s variational principle for some eigenvalue problem in Sobolev spaces with variable exponent
18:40–19:10	<b>Ileana Bucur</b>	A Riemann approach for Lebesgue integral

## Section 5

### Functional analytical methods in complex analysis

16:10–16:40	<b>Gabriel Prajitura</b>	Irregular vectors for composition operators
16:50–17:20	<b>Aurelian Gheondea</b>	Analytic Hermitian kernels
17:30–18:00	<b>Matteo Dalla Riva</b>	A functional analytic approach for a singularly perturbed nonlinear traction problem in linearized elastostatics

## Saturday, August 16<sup>th</sup>, 2008

09:00–09:45	<b>Matti Vuorinen</b>	Topics in quasiconformal mappings
09:55–10:40	<b>David Herron</b>	BiLipschitz homogeneity, inner diameter distance and quasiconformal and Riemann mappings

### Coffee

11:05–11:50	<b>John Lewis</b>	On a Liouville type theorem for harmonic maps to convex spaces via Markov chains
12:00–12:45	<b>Jeremy Tyson</b>	Lipschitz, Hölder and Sobolev surjections from Euclidean cubes

### Lunch

15:00–15:45	<b>Gerald Trutnau</b>	On the generator of a right-continuous Markov process
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### Coffee

## Section 1A

### Analytic functions of one complex variable: Univalence

16:10–16:55	<b>Gheorghe Oros</b>	New results related to Bernardi integral operator
17:05–17:35	<b>Grigore Ştefan Sălăgean</b>	Convolutions on certain classes of functions with bounded turning
17:45–18:15	<b>Daniel Breaz</b>	Univalence properties for a general integral operator
18:25–18:55	<b>Nicoale Pascu</b>	Univalence criteria for analytic functions defined in non-convex domains
19:05–19:35	<b>Mugur Acu</b>	An integral operator on meromorphic functions

## Section 1B

### Analytic functions of one complex variable: Other subjects

16:10–16:55	<b>Timo Erkama</b>	Cycles of quadratic polynomials
17:05–17:50	<b>Dorin Ghişa</b>	Computer experimentation with Blaschke product mappings

## Section 2

### Quasiconformal mappings and Teichmüller spaces

16:10–16:55	<b>Mihai Cristea</b>	Open, discrete mappings having local $ACL^n$ inverses
17:05–17:50	<b>Pekka Pankka</b>	Slow mappings of finite distortions
18:00–18:45	<b>Marcelina Mocanu</b>	Regularity properties of Orlicz-Sobolev functions on metric measure spaces
18:55–19:25	<b>Victoria Stanciu</b>	Normal and compact families of finite length distortion homeomorphisms

## Section 3

### Several complex variables

16:10–16:55	<b>Yuri Zelinskii</b>	Linearly convex complex analysis
17:05–17:50	<b>Peter Dovbush</b>	Normality and $P$ -point sequences
18:00–18:45	<b>Eugen Mihăilescu</b>	Complex dynamics on higher dimensional fractals

## Section 4

### Potential theory

16:10–16:55	<b>Sirkka-Liisa Eriksson</b>	Hyperbolic harmonic functions and their functions theory
17:05–17:35	<b>Eugen Popa</b>	Extreme points in convex envelopes of orbits of semidynamical systems
17:45–18:15	<b>Corneliu Udrea</b>	The convex functions: compactness and uniform convergence
18:25–18:55	<b>Natalia Zorii</b>	On interior capacities of condensers

## Section 5

### Functional analytical methods in complex analysis

16:10–16:40	<b>Jussi Laitila</b>	Weighted composition operators on analytic vector-valued function spaces
16:50–17:20	<b>Vasile Neagu</b>	On some perturbations of singular integral operators
17:30–18:00	<b>Luminita Lemnete-Ninulescu</b>	An operator-valued trigonometric moment problem
18:05–18:35	<b>Irina Meghea</b>	On some perturbed variational principles. Connexions and applications.

## Sunday, August 17<sup>th</sup>, 2008

*Location:* Conference hall of "Steaua Ariesului" Complex in Albal

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|-------------|----------------------------|---|
| 10:30–11:15 | <b>Marius Mitrea</b>       | Complex analysis, singular integrals and geometric measure theory |
| 11:15       | <b><i>Round Table:</i></b> | Recent trends in complex analysis and related topics              |

**Excursion and conference dinner**



# Monday, August 18<sup>th</sup>, 2008

- 09:00–09:45 **Ilpo Laine** Nevanlinna theory and difference operators  
09:55–10:40 **Klaus-Dieter Semmler** Hyperbolic polygons, Fuchsian groups, and Helling matrices

## Coffee

- 11:05–11:50 **Maria Karmanova** Geometric measure theory on metric structures  
12:00–12:45 **Turgay Kaptanoglu** Harmonic Besov and Bloch spaces on the unit ball

## Lunch

- 15:00–15:45 **Arturo Fernandez Arias** On the periods of harmonic and meromorphic forms on Klein surfaces

## Coffee

## Section 1A

### Analytic functions of one complex variable: Univalence

- 16:10–16:55 **Stanislawa Kanas** On conformal representations of the interior of an ellipse  
17:05–17:35 **Eugen Drăghici** Integral operators in the complex plane and uniqueness theorems concerning their transformations  
17:45–18:15 **Virgil Pescar** On univalence of some integral operators  
18:25–18:55 **Cornel Pinte** A proof of a univalent criterion by Noshiro, Warschawski, Wolff by means of h-monotone operators  
19:05–19:35 **Allu Vasudevarao** Regions of variability for certain classes of univalent functions

## Section 1B

### Analytic functions of one complex variable: Other subjects

16:10–16:55	<b>Shigeyasu Kamiya</b>	Complex hyperbolic triangle groups
17:05–17:50	<b>Risto Korhonen</b>	Painlevé type difference equations and finite-order meromorphic solutions
18:00–18:30	<b>Monica Roşiu</b>	Local trajectories on Klein surfaces

## Section 2

### Quasiconformal mappings and Teichmüller spaces

16:10–16:40	<b>Antti Rasila</b>	On boundary behavior of harmonic functions
16:50–17:20	<b>Anatoly Golberg</b>	New smoothness conditions for quasiconformal mappings
17:30–18:00	<b>Pekka Alestalo</b>	Approximation and extension of bilipschitz maps
18:10–18:40	<b>Emil Saucan</b>	Quasiregular mappings and PL differential geometry
18:50–19:20	<b>Kurt Falk</b>	Hyperbolic manifolds with dimension gap

## Section 3

### Several complex variables

16:10–16:55	<b>Irina Dmitrieva</b>	Vector boundary Riemann problems on compact surfaces and their applications in the algebraic functions theory
17:05–17:50	<b>Adrian Constantinescu</b>	Some grafts of complex affine plane. Convergence and Noetherianity
18:00–18:45	<b>Cezar Joiţa</b>	Extending Kähler metrics from subvarieties

## Section 4

### Potential theory

16:10–16:55	<b>Mounir Bezzarga</b>	Continuous semidynamical systems and deterministic semigroups on $L^p$
17:05–17:50	<b>Serban Costea</b>	Conductor inequalities and criteria for Sobolev-Lorentz two-weight inequalities
18:00–18:30	<b>Emil Moldoveanu</b>	On the monotony operator in a space of trajectories

## Section 5

### Functional analytical methods in complex analysis

16:10–16:40	<b>Dumitru Gaşpar</b>	Hilbert modules of analytic functions and prediction of multivalued stationary processes
16:50–17:20	<b>Ilie Valusescu</b>	On periodic estimation in complete correlated actions
17:30–18:00	<b>Pastorel Gaşpar</b>	Stochastic processes and sesquianalytic operator valued kernels
18:10–18:40	<b>Loredana Ciurdariu</b>	Hyponormal and p-hyponormal operators on pseudo-Hilbert spaces

## Tuesday, August 19<sup>th</sup>, 2008

09:00–09:45	<b>Ilkka Holopainen</b>	$p$ -harmonic functions on negatively curved spaces
09:55–10:40	<b>Massimo Lanza de Cristoforis</b>	Singular perturbation problems in potential theory: a functional analytic approach

### Coffee

11:05–11:50	<b>Raimo Näkki</b>	Harmonic measure, boundary accessibility and quasiconformal mappings
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### Lunch

## Section 1A

### Analytic functions of one complex variable: Univalence

12:00–12:30	<b>Olubunmi A. Fadipe-Joseph</b>	The Schwarzian derivative and univalent functions theory
12:35–13:05	<b>Abiodun T. Oladipo</b>	On a subclass of univalent functions
15:00–15:30	<b>D.O. Makinde</b>	On some properties of univalent functions

## Section 2

### Quasiconformal mappings and Teichmüller spaces

15:00–15:45	<b>Maria Karmanova</b>	Geometry of Carnot–Carathéodory spaces and applications
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### Coffee

16:10–16:55	<b>Maarit Jarvenpaa</b>	Visibility and fractal percolation
17:05–17:35	<b>Anca Andrei</b>	Some results concerning the behaviour of geometrically quasiconformal mappings in Ahlfors regular spaces
17:45–18:15	<b>Serafima Cerchez</b>	The direct products of quasimetric homeomorphisms