

# Functional Analysis X

*IUC, Dubrovnik, Croatia, June 29- July 6, 2008*

## Schedule

<b>30.06.2008.</b>	<b>Room I</b>	
<b>Morning session</b>	<ul style="list-style-type: none"> <li>• 9:00 – 9:45 <b>D. Vogan</b> Lusztig's conjecture and unitary representations I</li> <li>• 9:55 – 10:40 <b>M. Duflo</b> Weyl's functional calculus and equivariant cohomology I</li> <li>• 10:40 – 11:00 Coffee break</li> <li>• 11:00 – 11:45 <b>T. Kobayashi</b> Visible actions and multiplicity-free representations I</li> <li>• 11:55 – 12:40 <b>M. Rosellen</b> A survey of vertex algebra I</li> </ul> <p style="text-align: center;"><b>Chairman: H. Kraljević</b></p>	
<b>30.06.2008.</b>	<b>Room I</b>	<b>Room II</b>
<b>Afternoon session</b>	<ul style="list-style-type: none"> <li>• 16:45 – 17:00 Coffee</li> <li>• 17:00 – 17:45 <b>Z. Škoda</b>, Categorified actions and 2-representations</li> <li>• 17:55 – 18:40 <b>B. Širola</b> Self-normalizing reductive Lie subalgebras and subgroups</li> </ul> <p style="text-align: center;"><b>Chairman: D. Vogan</b></p>	<ul style="list-style-type: none"> <li>• 16:45 – 17:00 Coffee</li> <li>• 17:00 – 17:45 <b>O. Perše</b> Vertex operator algebra analogue of embedding of <math>B_4</math> into <math>F_4</math></li> <li>• 17:55 – 18:40 <b>G. Trupčević</b> Combinatorial bases of Feigin-Stoyanovsky's type subspaces of standard modules for affine Lie algebras of type A</li> </ul> <p style="text-align: center;"><b>Chairman: J. van de Leur</b></p>



<b>01.07.2008.</b>	<b>Room I</b>	
<b>Morning session</b>	<ul style="list-style-type: none"> <li>• 9:00 – 9:45 <b>M. Rosellen</b> A survey of vertex algebra II</li> <li>• 9:55 – 10:40 <b>T. Kobayashi</b> Visible actions and multiplicity-free representations I I</li> <li>• 10:40 – 11:00 Coffee break</li> <li>• 11:00 – 11:45 <b>D. Vogan</b> Lusztig's conjecture and unitary representations II</li> <li>• 11:55 – 12:40 <b>M. Duflo</b> Weyl's functional calculus and equivariant cohomology II</li> </ul> <p style="text-align: center;"><b>Chairman: I. Mirković</b></p>	
<b>01.07.2008.</b>	<b>Room I</b>	<b>Room II</b>
<b>Afternoon session</b>	<ul style="list-style-type: none"> <li>• 16:00 – 16:45 <b>D. Barbasch</b> K-types of small unitary representations and Dirac cohomology</li> <li>• 16:45 – 17:00 Coffee break</li> <li>• 17:00 – 17:45 <b>P. Trapa</b> Unipotent representations of <math>Sp(p,q)</math> and <math>SO^*(2n)</math>.</li> <li>• 17:55 – 18:40 <b>K. Nishiyama</b> Asymptotic cone of semisimple orbit for symmetric pairs</li> </ul> <p style="text-align: center;"><b>Chairman: T. Kobayashi</b></p>	<ul style="list-style-type: none"> <li>• 16:00 – 17:00 Coffee</li> <li>• 17:00 – 17:45 <b>A. Semikhatov</b> Mocking the theta. Logarithmically</li> <li>• 17:55 – 18:40 <b>T. Šikić</b> Some new examples of the extension of the classical Gauss series-product identity</li> </ul> <p style="text-align: center;"><b>Chairman: A. Meurman</b></p>

<b>02.07.2008.</b>	<b>Room I</b>	
<b>Morning session</b>	<ul style="list-style-type: none"> <li>• 9:00 – 9:45 <b>A.Semikhatov</b> Quantum–group counterparts of logarithmic conformal field theory I</li> <li>• 9:55 – 10:40 <b>A. Milas</b> Vertex algebras and logarithmic conformal field theory I: Introduction</li> <li>• 10:40 – 11:00 Coffee break</li> <li>• 11:00 – 11:45 <b>J. van de Leur</b> The homogeneous realization of level one <math>A_2^{(1)}</math>–modules and rational solutions of Painlevé VI, I</li> <li>• 11:55 – 12:40 <b>D. Jakelić</b> Finite-dimensional representations of hyper loop algebras I</li> </ul> <p style="text-align: center;"><b>Chairman: D. Adamović</b></p>	
<b>02.07.2008.</b>	<b>Room I</b>	<b>Room II</b>
<b>Afternoon session</b>	<ul style="list-style-type: none"> <li>• 16:45 – 17:00 Coffee</li> <li>• 17:00 – 17:45 <b>D. Ciubotaru</b> Unitarizable ramified principal series</li> <li>• 17:55 – 18:40 <b>D. Miličić</b> Singular localization and a result of Carayol and Knapp</li> </ul> <p style="text-align: center;"><b>Chairman: M. Duflo</b></p>	<ul style="list-style-type: none"> <li>• 16:45 – 17:00 Coffee</li> <li>• 17:00 – 17:45 <b>A. Meurman</b> Orthogonal decomposition of <math>E_8</math> and the Dempwolff group</li> <li>• 17:55 – 18:40 <b>M. Jerković</b> Recurrence relations for characters of affine Lie algebra <math>A_2^{(1)}</math></li> </ul> <p style="text-align: center;"><b>Chairman : M. Rosellen</b></p>



<b>03.07.2008.</b>	<b>Room I</b>	
<b>Morning session</b>	<ul style="list-style-type: none"> <li>• 9:00 – 9:45 <b>D. Vogan</b> Lusztig’s conjecture and unitary representations III</li> <li>• 9:55 – 10:40 <b>T. Kobayashi</b> Visible actions and multiplicity-free representations III</li> <li>• 10:40 – 11:00 Coffee break</li> <li>• 11:00 – 11:45 <b>A. Milas</b> Vertex algebras and logarithmic conformal field theory II: Triplet vertex algebra <math>W(p)</math></li> <li>• 11:55 – 12:40 <b>A. Semikhatov</b> Quantum–group counterparts of logarithmic conformal field theory II</li> </ul> <p style="text-align: center;"><b>Chairman: B. Širola</b></p>	
<b>03.07.2008.</b>	<b>Room I</b>	<b>Room II</b>
<b>Afternoon session</b>	<ul style="list-style-type: none"> <li>• 16:45 – 17:00 Coffee</li> <li>• 17:00 – 17:45 <b>M. Havlickova</b> Boundaries of K–types in discrete series</li> <li>• 17:55 – 18:40 <b>M. Božičević</b> Stable nilpotent orbital integrals</li> </ul> <p style="text-align: center;"><b>Chairman: D. Barbasch</b></p>	<ul style="list-style-type: none"> <li>• 16:45 – 17:00 Coffee</li> <li>• 17:00 – 17:45 <b>D. Adamović</b> On the representation theory of a family of <math>N=1</math> vertex superalgebras</li> <li>• 17:55 – 18:40 <b>M. Rosellen</b> OPE–algebras: A vertex algebra formulation of conformal field theory I</li> </ul> <p style="text-align: center;"><b>Chairman: A. Milas</b></p>

<b>04.07.2008.</b>	<b>Room I</b>	
<b>Morning session</b>	<ul style="list-style-type: none"> <li>• 9:00 – 9:45 <b>M. Duflo</b> Weyl's functional calculus and equivariant cohomology III</li> <li>• 9:55 – 10:40 <b>D. Vogan</b> Lusztig's conjecture and unitary representations IV</li> <li>• 10:40 – 11:00 Coffee break</li> <li>• 11:00 – 11:45 <b>I. Mirković</b> Topological methods in representation theory I</li> <li>• 11:55 – 12:40 <b>K. Vilonen</b> T.B.A. I</li> </ul> <p style="text-align: center;"><b>Chairman: D. Miličić</b></p>	
<b>04.07.2008.</b>	<b>Room I</b>	<b>Room II</b>
<b>Afternoon session</b>	<ul style="list-style-type: none"> <li>• 16:00 – 16:45 <b>T. Kobayashi</b> Visible actions and multiplicity-free representations IV</li> <li>• 16:45 – 17:00 Coffee break</li> <li>• 17:00 – 17:45 <b>J. S. Huang</b> Dirac cohomology of <math>(\mathfrak{g}, K)</math>-modules</li> <li>• 17:55 – 18:40 <b>Wai Ling Yee</b> Kazhdan–Lusztig polynomials and signature computations</li> </ul> <p style="text-align: center;"><b>Chairman: K. Vilonen</b></p>	<ul style="list-style-type: none"> <li>• 16:45 – 17:00 Coffee</li> <li>• 17:00 – 17:45 <b>J. van de Leur</b> The homogeneous realization of level one <math>A_2^{(1)}</math>-modules and rational solutions of Painlevé VI, II</li> <li>• 17:55 – 18:40 <b>M. Rosellen</b> OPE-algebras: A vertex algebra formulation of conformal field theory II</li> </ul> <p style="text-align: center;"><b>Chairman : A. Semikhatov</b></p>



<b>05.07.2008.</b>	<b>Room I</b>	
<b>Morning session</b>	<ul style="list-style-type: none"> <li>• 9:00 – 9:45 <b>D. Jakelić</b> Finite-dimensional representations of hyper loop algebras II</li> <li>• 9:55 – 10:40 <b>M. Duflo</b> Weyl's functional calculus and equivariant cohomology IV</li> <li>• 10:40 – 11:00 Coffee break</li> <li>• 11:00 – 11:45 <b>K. Vilonen</b> T.B.A. II</li> <li>• 11:55 – 12: 40 <b>I. Mirković</b> Topological methods in representation theory II</li> </ul> <p style="text-align: center;"><b>Chairman: P. Pandžić</b></p>	