
VERTEX ALGEBRAS AND RELATED TOPICS

University of Zagreb, Croatia, May 24th – 27th, 2018



Znanstveni centar izvrsnosti za kvantne i
kompleksne sustave te reprezentacije
Liejevih algebri

Projekt KK.01.1.1.01.0004

Projekt je sufinancirala Europska unija iz Europskog
fonda za regionalni razvoj. Sadržaj ovog
znanstvenog skupa isključiva je odgovornost
Prirodoslovno-matematičkog fakulteta Sveučilišta u
Zagrebu te ne predstavlja nužno stajalište Europske
unije.



Europska unija
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Europski fond za regionalni razvoj



Operativni program
**KONKURENTNOST
I KOHEZIJA**

SCHEDULE

Thursday, May 24th

9:00 – 9:50 **James Lepowsky: Points of view on combinatorial bases**

10:00 – 10:50 **Paolo Papi: Collapsing levels and the representation theory of affine vertex algebras**

Chair: **Dražen Adamović**

10:50 – 11:10 Coffee break

11:10 – 12:00 **Masahiko Miyamoto: Griess subalgebra and multivariable modular forms**

12:10 – 13:00 **Ching Hung Lam: Orbifold VOAs associated with coinvariant sublattices of Leech lattices**

Chair: **Ozren Perše**

13:00 – 15:00 Lunch break

15:00 – 15:50 **Dragan Miličić: Kazhdan-Lusztig algorithm for Whittaker modules**

15:50 – 16:10 Coffee break

16:10 – 17:00 **Kazuya Kawasetsu: The intermediate vertex subalgebras of the lattice vertex operator algebras**

17:10 – 17:40 **Igor Ciganović: Unramified representations of the metaplectic group**

Chair: **Tomislav Šikić**

Friday, May 25th

9:00 – 9:50 **Shaobin Tan: q -Virasoro algebra and affine Kac-Moody algebra**

10:00 – 10:50 **Simon Wood: Admissible level $\frac{1}{2}$ minimal models and their relaxed highest weight modules**

Chair: **Dražen Adamović**

10:50 – 11:10 Coffee break

11:10 – 12:00 **Cuipo Jiang: Level-rank duality for some affine vertex operator algebras**

12:10 – 13:00 **Qing Wang: Representations of Z_2 -Orbifold of Parafermion Vertex Operator Algebras**

Chair: **Slaven Kožić**

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- 13:00 – 15:00 Lunch break
- 15:00 – 15:50 **Jehanne Dousse: Combinatorial approach to partition identities from representation theory**
- 15:50 – 16:10 Coffee break
- 16:10 – 17:00 **Arne Meurman: Bases of the integrable highest weight modules of $\mathfrak{sl}(2, \mathbb{C})^{\sim}$**
- 17:10 – 18:00 **Stefano Capparelli: Partition identities and affine Lie algebras**
Chair: **Ozren Perše**

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- 19:00 – 22:00 **Conference dinner**

Saturday, May 26th

- 9:30 – 10:00 **Presentation of the results of CSF project 2634 (Introduction by D. Adamović):**
- 10:00 – 10:40 **Gordan Radobolja: Free field realization of twisted Heisenberg-Virasoro algebra at level zero and $W(2,2)$ algebra**
- 10:50 – 11:30 **Slaven Kožić: Etingof-Kazhdan's quantum universal affine vertex algebra**
Chair: **Dražen Adamović**

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- 11:30 – 11:50 Coffee break
- 11:50 – 12:30 **Marijana Butorac: Combinatorial bases of principal subspaces of standard modules for twisted affine Lie algebras of type $A_{2l-1}^{(2)}$, $D_{l,1}^{(2)}$, $E_6^{(2)}$ and $D_4^{(3)}$**
- 12:40 – 13:20 **Goran Trupčević: Bases of Feigin-Stoyanovsky's type subspaces**
- 13:40 – 14:30 **Mirko Primc: Some combinatorial coincidences for standard representations of affine Lie algebras**
Chair: **Tomislav Šikić**

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- 15:00 – 18:00 Banquet

Sunday, May 27th

Free discussions and city tour

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<https://www.pmf.unizg.hr/>
<http://bela.phy.hr/quantixlie/>

Europskog fonda za regionalni razvoj.

Za više informacija o EU fondovima: <http://www.strukturnifondovi.hr/>