

Representation Theory XIX
IUC, Dubrovnik, Croatia, June 23 – 29, 2025
Schedule: Vertex Algebra Section

Monday, June 23

9:00 – 9:50. **Victor Kac:** Modular invariant vertex operator algebras
10:00 – 10:50 **Chongying Dong:** Kac-Wakimoto Hypothesis
and coset constructions

Chair: Dražen Adamović

10:50 – 11:10 **Coffee break**
11:10 – 12:00 **Qing Wang:** A duality between $L_k(\mathfrak{osp}(1|2))$ at the critical level
and an $N = 4$ superconformal vertex algebra

12:10 – 13:00 **Dražen Adamović:** On the representation theory of
affine VOAs and W -algebras via inverse QHR

Chair: Veronika Pedić Tomić

16:00 – 16:45 **Thibaut Julliard:** Reduction by stages, a geometric approach
16:45 – 17:05 **Coffee break**
17:05 – 17:50 **Veronika Pedić Tomić:** Fusion rules for the
Weyl vertex algebra and the singlet vertex algebra

Chair: Qing Wang

Tuesday, June 24

9:00 – 9:50 **Antun Milas:** Two constructions of vertex algebras
10:00 – 10:50 **Sven Moller:** On a certain vector-space correspondence
between affine and Virasoro vertex operator algebras

Chair: Mirko Primc

10:50 – 11:10 **Coffee break**
11:10 – 12:00 **Nils Scheithauer:** Automorphic forms associated to Conway's group
12:10 – 13:00 **Mirko Primc:** Linear independence for $C_1^{(1)}$ by using $C_{21}^{(1)}$

Chair: Antun Milas

Free discussion

Wednesday, June 25

9:00 – 9:50 **Shigenori Nakasutka:** On the center of affine Lie superalgebras at the critical level

10:00 – 10:50 **Ivana Vukorepa:** A new quasi-lisse affine vertex algebra of type D4

Chair: Ching Hung Lam

10:50 – 11:10 **Coffee break**

11:10 – 12:00 **Robert McRae:** Vertex operator algebras, commutative algebras in braided monoidal categories, and rigidity

12:10 – 13:00 **Masahiko Miyamoto:** Primary states and cusp forms on the moonshine VOA V_{24}

Chair: Gordan Radobolja

Free afternoon

Thursday, June 26

9:00 – 9:50 **Vyacheslav Futorny:** Realizations of relaxed highest weight modules for Affine Lie algebras

10:00 – 10:50 **Paolo Papi:** CONFORMAL AND COLLAPSING LEVELS IN AFFINE W -ALGEBRAS

Chair: Sven Moller

10:50 – 11:10 **Coffee break**

11:10 – 12:00 **Ching Hung Lam:** Twisted modules associated with simple current extensions related to permutation orbifolds

12:10 – 13:00 **Xuanzhong Dai:** Quantum hamiltonian reduction and quasi-lisse vertex algebras

Chair: Tomoyuki Arakawa

16:00 – 16:45 **Damien Simon:** Representation theory of the vertex algebra
of chiral differential operators on a reductive group
16:45 – 17:05 **Break**
17:05 – 17:50 **Nina Yu:** Zhu Algebras of Permutation Orbifold Vertex
Operator Algebras

Chair: Anne Moreau

Friday, June 27

9:00 – 9:50 **Hao Li:** Some Perspectives on Non-Rational Vertex Algebras
10:00 – 10:50 **Ivan Mirković:** Vertex algebras and moduli spaces

Chair: Tomislav Šikić

10:50 – 11:10 **Coffee break**
11:10 – 12:00 **Kaiwen Sun:** 2d CFTs, Borcherds products and
hyperbolization of affine Lie algebras
12:10 – 13:00 **Li Ren:** Modular extensions and orbifold theory

Chair: Chongying Dong

16:00 - 16:45 **Justine Fasquel:** Virasoro type reductions and their inverse
16:45 – 17:05 **Break**
17:05 – 17:50 **Ethan Fursman:** Reduction for Relaxed Modules and their
Spectral Flows

Chair: Ana Kontrec

Saturday, June 28

Free discussions