REPRESENTATION THEORY XVI

Inter-University Centre, Dubrovnik, Croatia
June 24th – 29th, 2019

SCHEDULE: VERTEX ALGEBRA SECTION

Monday, June 24

9:00 – 9:50	**Yi-Zhi Huang:** A construction of twisted modules for grading-restricted vertex (super)algebras
10:00 – 10:50	**Cuibo Jiang:** Simplicity and rationality of moonshine type vertex operator algebras generated by Ising vectors of σ-type

Chair: Dražen Adamović

10:50 – 11:10	**Coffee break**
11:10 – 12:00	**Victor Kac:** Cohomology of algebraic structures: from Lie algebras to vertex algebras (**Plenary lecture**)
12:10 – 13:00	**Anne Moreau:** Singularities of nilpotent Slodowy slices and collapsing levels for W-algebras (**Plenary lecture**)

Chair: Ozren Perše

16:00 – 16:50	**Nina Yu:** 6A-algbera and its representations
17:00 – 17:50	**Qing Wang:** Fusion rules for $\mathbb{Z}_2$-orbifolds of affine and parafermion vertex operator algebras of type $A_1^{(1)}$

Chair: Ana Kontrec

Tuesday, June 25

9:00 – 9:50	**Katrina Barron:** On higher Zhu's algebras
10:00 – 10:50	**Ching Hung Lam:** Automorphism groups of some orbifold models of lattice VOAs

Chair: Mirko Primc

10:50 – 11:10	**Coffee break**
11:10 – 12:00	**Tomoyuki Arakawa:** Quantum Langlands duality of representations of W-algebras (**Plenary lecture**)
12:10 – 13:00	**Ivan Mirković:** A geometric construction of Witt rings (**Plenary lecture**)

Chair: Dražen Adamović

| 16:00 – 16:50 | **Nils Scheithauer**: Generalised deep holes in the vertex operator algebra associated with the Leech lattice |
| 17:00 – 17:50 | **Sven Möller:** BRST Construction of 10 Borcherds-Kac-Moody Algebras |

Chair: Veronika Pedić

Wednesday, June 26

| 9:00 – 9:50 | **Antun Milas:** On some q-series identities of Rogers-Ramanujan type |
| 10:00 – 10:50 | **Michael Tuite:** Vertex operator algebras on general genus Riemann surfaces |

Chair: Tomislav Šikić

10:50 – 11:10	**Coffee break**
11:10 – 12:00	**Anna Romanov:** A Kazhdan--Lusztig algorithm for Whittaker modules (**Plenary lecture**)
12:10 – 13:00	**Pierluigi Moseneder Frajria:** Conformal embeddings in basic classical Lie superalgebras (**Plenary lecture**)

Chair: Antun Milas

Free afternoon

Thursday, June 27

| 9:00 – 9:50 | **Hiroshi Yamauchi:** 23 involutions, Fischer group Fi_{23} and the moonshine VOA |
| 10:00 – 10:50 | **Paolo Papi:** On collapsing levels |

Chair: Gordan Radobolja

10:50 – 11:10	**Coffee break**
11:10 – 12:00	**Masahiko Miyamoto:** On C_2-cofiniteness of Commutant subVOA
12:10 – 13:00	**Matt Krauel:** Some Zhu reduction formula and applications

Chair: Slaven Kožić

16:00 – 16:50   **Michael Penn:**   Orbifolds and W-algebras
17:00 – 17:50   **Ana Ros Camacho:**   A factory of equivalences within the Landau-Ginzburg/conformal field theory correspondence

Chair: Nina Yu

Friday, June 28

 9:00 – 9:50   **Peter Bantay:**   Orbifold deconstruction
10:00 – 10:50   **Sebastiano Carpi:**   Weak quasi-Hopf algebras and vertex operator algebras

Chair: Ozren Perše

10:50 – 11:10   **Coffee break**
11:10 – 12:00   **Andrew Linshaw:**   Cosets of the large N=4 superconformal algebra and the diagonal coset of sl_2
12:10 – 13:00   **Discussion on open problems in vertex algebra theory (moderated by D. Adamović)**

Chair: Paolo Papi

16:00 – 16:50   **Gaywale Yamasuklna:**   On Indecomposable **N**-graded Vertex Algebras

17:00 – 17:50   **Marijana Butorac:**   Principal subspaces for the affine Lie algebras of type F, E and D

Chair: Ante Čeperić

Saturday, June 29

 8:30 – 9:20   **Slaven Kožić:**   Quantum currents and quantum vertex algebras
 9:30 – 10:00   **Veronika Pedić:**   On irreducibility of Whittaker modules for cyclic orbifold vertex algebras and application to the Weyl algebra
10:10 – 10:40   **Ana Kontrec:**   Smith algebra and classification of irreducible modules for certain W-algebras
10:40 – 11:00   **Coffee break**
11:00 – 11:30   **Ante Čeperić:**   Equality of dimensions of Zhu's algebra and C_2 algebra for symplectic fermions
11:40 – 12:30   **Chris Sadowski:**   Principal subspaces of twisted modules for certain lattice vertex operator algebras

Chair: Marijana Butorac