

**International Conference on Vertex Operator Algebras  
and Related Areas**

**Talk Schedule**

Updated on July 3, 2008

**All talks will be in Williams Hall room 314.**

## July 7, Monday

1. 8:15am-8:30am: Greetings from Salvatore J. Catanzaro, Associate Dean of the College of Arts and Sciences (ISU), and Professor George F. Seelinger, Chair of the Department of Mathematics (ISU).
  2. 8:30am-9:20am: *Exceptional VOAs and the Virasoro Algebra*, Michael Tuite, National University of Ireland, Ireland.
  3. 9:20am-9:30am: Ten-minute break.
  4. 9:30am-10:20am: *Representations of vertex operator algebras and finite braided tensor categories*, Yi-Zhi Huang, Rutgers University, New Brunswick.
  5. 10:20am-10:30am: Ten-minute break.
  6. 10:30am-11:20am:  *$C_{11}$ ,  $C_2$ , and twisted representations*, Terry Gannon, University of Alberta, Canada.
  7. 11:20pm-11:30pm: Ten-minute break.
  8. 11:30am-12:00pm: *Uniformization of genus-zero and genus-one  $N=2$  super-Riemann surfaces and implications for superconformal field theory*, Katrina Barron, University of Notre Dame.
- **12:00pm-2:00pm: Noon Break.**
9. 2:00pm-2:50pm: *Andrews' analytic generalizations of the Roger-Ramanujan identities and certain representations of  $\mathbf{A}_1^{(1)}$* , Robert Wilson, Rutgers University, New Brunswick.
  10. 2:50pm-3:00pm: Ten-minute break.
  11. 3:00pm-3:50pm: *Algebraic, geometric, and representation theory approaches to bases of affine quantum groups*, Zongzhu Lin, Kansas State University.
  12. 3:50pm-4:00pm: Ten-minute break.
  13. 4:00pm-4:30pm: *Vertex algebras of differential operators over algebraic groups*, Minxian Zhu, Yale University.
  14. 4:35pm-5:05pm: *On McKay's  $E_7$  and  $E_6$  observations*, Ching Hung Lam, National Cheng Kung University, Taiwan.
  15. 5:10pm-5:40pm: *Deformed  $W$  algebras and tableau description of Macdonald polynomials*, Ayumu Hoshino, Sophia University, Japan.

## July 8, Tuesday

1. 8:30am-9:20am: *Orthogonal Representations of Hopf Algebras*, Susan Montgomery, University of Southern California.
  2. 9:20am-9:30am: Ten-minute break.
  3. 9:30am-10:20am: *Lie idempotents and renormalization in pQFT*, Frederic Patras, Laboratoire J.-A. Dieudonné UMR 6621, CNRS, France.
  4. 10:20am-10:30am: Ten-minute break.
  5. 10:30am-11:00am: *Trees, permutations, and bidendriform bialgebras*, Loic Foissy, Université de Reims, France.
  6. 11:05am-11:35am:  $V_L^+$ -modules and weak Hopf algebras, Christopher Goff, University of the Pacific.
  7. 11:40am-12:10pm: *Congruence Subgroups and Generalized Frobenius-Schur Indicators*, Siu-Hung Ng, Iowa State University.
- **12:10pm-2:00pm: Noon Break.**
8. 2:00pm-2:50pm: *Hopf algebras of rooted trees and the Hopf algebras of symmetric functions*, Michael Hoffman, U. S. Naval Academy.
  9. 2:50pm-3:00pm: Ten-minute break.
  10. 3:00pm-3:50am: *Hyperbolic Weyl groups and the four normed division algebras*, Alex Feingold, Binghamton University.
  11. 3:50pm-4:00pm: Ten-minute break.
  12. 4:00pm-4:30pm: *A free field realization of toriodal  $sl_n$* , Liz Jurisich, College of Charleston.
  13. 4:35pm-5:05pm: *Realizations of elliptic affine  $sl(2)$* , Ben Cox, College of Charleston.
  14. 5:10pm-5:40pm: *New Perspectives on exponentiated derivations, the formal Taylor theorem and Faà di Bruno's formula*, Thomas Robinson, Rutgers University, New Brunswick.
- **6:00pm-9:00pm: we will have a conference reception hosted by the ISU Mathematics Department. The reception will be in the Business Building atrium (lowest floor).**

## July 9, Wednesday

1. 8:30am-9:20am: *Fermionic realization of some toroidal Lie algebras*, Kailash Misra, North Carolina State University.
2. 9:20am-9:30am: Ten-minute break.
3. 9:30am-10:20am: *On a class of infinite-dimensional Lie algebras related to semisimple Lie algebras*, Vladimir Retakh, Rutgers University, New Brunswick.
4. 10:20am-10:30am: Ten-minute break.
5. 10:30am-11:00am: *Extensions of weight modules of Lie algebras*, Dimitar Grantcharov, San Jose State University.
6. 11:05am-11:35am: *Two new results on spanning sets for vertex operator algebras and their quasimodules*, Geoffrey Buhl, California State University Channel Islands.
7. 11:40am-12:30pm: *Moonshine for Conway's group*, Nils Scheithauer, University of Edinburgh, UK.
- **12:30pm-2:00pm: Noon Break.**
8. 2:00pm-2:50pm: *Logarithmic tensor product theory for vertex operator algebra modules*, James Lepowsky, Rutgers University, New Brunswick.
9. 2:50pm-3:00pm: Ten-minute break.
10. 3:00pm-3:50am: *Rational vertex operator algebras with central charge 1*, Chongying Dong, University of California at Santa Cruz.
11. 3:50pm-4:00pm: Ten-minute break.
12. 4:00pm-4:50pm: *Quantum Vertex Operator Algebras and Modules*, Haisheng Li, Rutgers University, Camden.
13. 4:50pm-5:00pm: Ten-minute break.
14. 5:00pm-5:30pm: *Triplet and super triplet vertex algebras, quantum groups and modular forms*, Antun Milas, University of Albany.

## July 10, Thursday

1. 8:30am-9:20am: *On the transformation property of the Lie algebras associated with vertex operator algebras*, Atsushi Matsuo, The University of Tokyo, Japan.
  2. 9:20am-9:30am: Ten-minute break.
  3. 9:30am-10:20am: *W-algebras related to parafermion algebras*, Hiromichi Yamada, Hitotsubashi University, Japan.
  4. 10:20am-10:30am: Ten-minute break.
  5. 10:30am-11:00am: *Vertex-algebraic structure of certain modules for affine Lie algebras underlying recursions*, Corina Calinescu, Ohio State University.
  6. 11:05am-11:35am: *A moonshine highest-weight vector for every cusp form?*, Kate Hurley, Georgia Institute of Technology.
  7. 11:40am-12:10pm: *Invariant chiral differential operators*, Andrew Linshaw, University of California at San Diego.
- **12:10pm-2:00pm: Noon Break.**
8. 2:00pm-2:50pm: *Generalized modular forms*, Marvin Knopp, Temple University.
  9. 2:50pm-3:00pm: Ten-minute break.
  10. 3:00pm-3:50am: *Generalized modular functions, their Fourier coefficients and vertex operator algebras*, Winfried Kohnen, Heidelberg, Germany.
  11. 3:50pm-4:00pm: Ten-minute break.
  12. 4:00pm-4:30pm: *On the coefficients of modular forms for noncongruence subgroups*, Ling Long, Iowa State University.
  13. 4:35pm-5:05pm: *On products of two Eisenstein series and spaces of cusp forms*, Yves Martin, University of Chile, Chile.
- 5:15pm-5:25pm: **Conference Photo** taken at the front door of Williams Hall.
- 6:30pm-9:00pm: **Banquet Dinner to Celebrate Professor Geoffrey Mason's 60th Birthday** at Biaggi's (1501 N Veterans Pky, Bloomington, IL 61704. About three blocks south of the Signature Inn.)

## July 11, Friday

1. 8:30am-9:20am: *Vector-valued modular forms and the hypergeometric equation*, Peter Bantay, Eotvos Lorand University, Hungary.
2. 9:20am-9:30am: Ten-minute break.
3. 9:30am-10:00am: *Vertex algebras in higher dimensions*, Bojko Bakalov, North Carolina State University.
4. 10:05am-10:35am: *A characterization of the moonshine vertex operator algebra by means of Virasoro frames*, Hiroshi Yamauchi, Aichi University, Japan.
5. 10:35am-10:45am: Ten-minute break.
6. 10:45am-11:15pm: *Recurrence relations for characters of affine Lie algebra  $A_\ell^{(1)}$* , Miroslav Jerkovic, University of Zagreb, Croatia.
7. 11:20am-11:50pm: *Combinatorial bases of Feigin-Stoyanovsky's type subspaces of standard modules for  $\tilde{\mathfrak{sl}}_{\ell+1}(\mathbb{C})$* , Goran Trupcevic, University of Zagreb, Croatia.
8. 11:55am-12:25pm: *Extremal Vertex Operator Algebras*, Gerald Hoehn, Kansas State University.

**In the Afternoon: open discussion.**

(Bus schedule as before)