

Research Interests Algebraic and combinatorial representation theory

Education · **University of California, Berkeley, USA**
Ph.D., Mathematics, May 2007.
Dissertation: “Kac-Moody superalgebras of finite growth”.
Advisor: Vera Serganova.

· **Texas A & M University, College Station, USA**
B.S., Mathematics, May 2001, summa cum laude.

Employment · **Technion - Israel Institute of Technology**
Aly Kaufman Postdoctoral Fellow
October 2011 - February 2014
Hosts: Shlomi Gelaki, Tobias Hartnick

Adjunct Lecturer: Spring 2014

· **Bar-Ilan University, Israel**
Postdoctoral Researcher
October 2010 - September 2011
Host: Jonathan Beck

· **The Weizmann Institute of Science, Israel**
Postdoctoral Fellow
July 2007 - August 2009, December 2009 - June 2010
Hosts: Maria Gorelik, Anthony Joseph

Adjunct Lecturer: Spring 2011; Winter 2013

· **Nara Women’s University, Japan**
JSPS Postdoctoral fellow
Japanese Society for the Promotion of Science
September 2009 - November 2009
Host: Tomoyuki Arakawa

Visiting Positions · University of Michigan, Ann Arbor, 7.7 - 20.7.2013; 20.1 - 31.1.2014
· RIMS: Research Institute for Mathematical Sciences, Kyoto University, Japan, 27.6 - 12.7.2011
· Nara Women’s University, Japan, 8.11 - 22.11.2008

Curriculum Vitae

- Refereed Journals**
- C. Hoyt, *Good gradings of basic Lie superalgebras*, Israel Journal of Mathematics, 192 no. 1 (2012), 251-280.
 - C. Hoyt, *Regular Kac-Moody superalgebras and integrable highest weight modules*, Journal of Algebra, 324 no. 12 (2010), 3308-3354.
 - C. Hoyt and S. Reif, *Simplicity of vacuum modules over affine Lie superalgebras*, Journal of Algebra, 321 no. 10 (2009), 2861-2874.
 - C. Hoyt and V. Serganova, *Classification of finite-growth general Kac-Moody superalgebras*, Communications in Algebra, 35 no. 3 (2007), 851-874.
- Proceedings**
- C. Hoyt, *On good $\mathbb{Z}$ -gradings of basic Lie superalgebras*, Proceedings of the RIMS Symposium on Problems in Representation Theory and Harmonic Analysis, Japan (2011).
 - C. Hoyt, *Classification of finite-growth contragredient Lie superalgebras*, Proceedings of the Symposium on Representation Theory, Japan (2009).
- Other Publications**
- C. Hoyt, *Kac-Moody superalgebras of finite growth*, UC Berkeley dissertation, ProQuest Publishing, May 2007.
- Preprints**
- M. Chmutov, C. Hoyt, S. Reif, *Kac-Wakimoto character formula for the general linear Lie superalgebra*. <http://arxiv.org/abs/1310.3798> (submitted)
 - C. Hoyt, *Weight modules of $D(2, 1, \alpha)$* , to appear in: Springer volume “Advances in Lie superalgebras”, Proceedings of the conference on Lie superalgebras, Istituto di Alta Matematica, Rome, Italy. (refereed book) <http://arxiv.org/abs/1307.8006>
- In preparation**
- M. Chmutov, C. Hoyt, S. Reif, *Character formulas and tame representations of $\mathfrak{gl}(m|n)$*
- Mathematical Editing**
- A. Joseph, *Consequences of the Littelmann path theory for the structure of the Kashiwara $B(\infty)$ Crystal*, Highlights in Lie Algebraic Methods, Progress in Mathematics, Vol. 295, Birkhauser, 2011, 25-64.

Curriculum Vitae

- Honors and Awards**
- 2009 JSPS Postdoctoral Fellowship: Japanese Society for the Promotion of Science.
 - 2004 Mentored Research Award: University of California, Berkeley Graduate Division.
 - Honorable mention for 2002 NSF Graduate Research Fellowship: National Science Foundation.
 - Honorable mention for the 2001 Alice T. Schafer Prize: Association for Women in Mathematics.
- Teaching Experience**
- Spring 2014: Lie algebras, Technion (Lectures in Hebrew)
 - Fall 2013: Introduction to Lie algebras, Weizmann Institute
 - Spring 2011: Introduction to Lie algebras, Weizmann Institute
 - Spring 2010: Introduction to Lie algebras, Weizmann Institute
 - Fall 2007: Introduction to Lie algebras, Weizmann Institute
 - Summer 2005: Analytic Geometry and Calculus, UC Berkeley
 - Summer 2004: Analytic Geometry and Calculus, UC Berkeley
- Other activities**
- Reading course instructor: Commutative algebra, Weizmann Institute, Fall 2010.
 - Reading course instructor: Lie algebras, Weizmann Institute, Fall 2009.
 - Residential Counselor, Stanford University Math Camp, Summer 2003. SUMaC is a one month international program for talented high school students. I led a group project on coding theory, in addition to supervising and tutoring the students.

Curriculum Vitae

Conference Talks

- Twelfth Night Workshop in Representation Theory, The Weizmann Institute of Science, Israel, January 2014,
Kac-Wakimoto character formula for $\mathfrak{gl}(m|n)$.
- Workshop on Orbits, Primitive Ideals and Quantum Groups, The Weizmann Institute of Science, Israel, February 2013,
Finite weight modules for the Lie superalgebra $D(2, 1, a)$.
- Lie superalgebras, Roma, Istituto Nazionale di Alta Matematica, Italy, December 2012, *Good gradings of basic Lie superalgebras.*
- RIMS Symposium on Problems in Representation Theory and Harmonic Analysis, Research Institute for Mathematical Sciences, Japan, June 2011, *Good gradings of basic Lie superalgebras.*
- Workshop on Problems and Progress of Lie Algebraic Theory, The Weizmann Institute of Science, Israel, July 2010,
Good gradings of basic Lie superalgebras.
- Symposium on Representation Theory, Okinawa, Japan, November 2009, *Classification of finite-growth contragredient Lie superalgebras.*
- Workshop on Representation Theory of Lie Algebraic Systems, The Weizmann Institute of Science, Israel, December 2006,
Finite-growth general Kac-Moody superalgebras.
- AMS Western Section Meeting, San Francisco State University, USA, April 2006, *Regular Kac-Moody superalgebras.*
- Lie Theory Workshop, MSRI, Berkeley, CA, USA, January 2005, *Classification of finite-growth Kac-Moody superalgebras.*