Benjamin T. Webster
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Education

University of California, Berkeley 2002-2007 (expected)

Ph. D. student. Advisor: Nicolai Reshetikhin.

Simon's Rock College of Bard 1998-2002

B.A. in Mathematics *summa cum laude*
Senior Thesis (awarded High Honors): *Linearly equivalent actions and their applications*

Publications

Nick Proudfoot and Ben Webster, *Arithmetic and geometry of hypertoric varieties*, arXiv:math.AG/0411350.

Ben Webster, *Stabilization phenomena in Kac-Moody algebras and quiver varieties*, arXiv:math.RT/0505619.

Teaching

University of California, Berkeley Fall 2002, Fall 2005

Graduate Student Instructor: Taught 6 hours a week of discussion section.
Fall 2002: Math 1B (the second semester of the standard calculus course)
Fall 2005: Math 53 (multivariable caluclus)

Talks Given

"Stabilization in Kac-Moody algebras and quiver varieties," Lie Groups, Lie Algebras and their Representations, Eugene, Oregon; (October 2005)

"Stabilization in Kac-Moody algebras and quiver varieties," Workshop in Representation Theory, Berkeley, CA; (May 2005)

"Kazhdan-Lusztig polynomials for hypertoric varieties," AMS Western Sectional Conference, Santa Barbara, CA; (April 2005)

"An introduction to intersection cohomology," Graduate Student Topology Conference, Evanston, IL; (April 2005)

"The intersection cohomology of hypertoric varieties," Combinatorics, Geometry, and Representation Theory Seminar, UC Berkeley; (October 2004)

"Quiver varieties and Kac-Moody algebras," Combinatorics, Geometry, and Representation Theory Seminar, UC Berkeley; (March 2004)

"Beaulieu's construction over a field of arbitrary characteristic" and "Mackey functors and Sunada's theorem," AMS Southeastern Sectional Conference, Baton Rouge, LA; (March 2003)

Awards and Honors

NSF Graduate Research Fellowship (2003)

Research Interests

The representations of quantum groups specialized at roots of unity and associated geometry. The geometry of hypertoric and quiver varieties. The relationship between quiver varieties and stabilization for large Dynkin diagrams. Canonical bases for Lie algebras and cluster algebras.

Additional Information

Citizenship: United States
Reading knowledge of German and Spanish.