

The 2014 ICM Emmy Noether Lecturer is Georgia Benkart for her fundamental contributions to several branches of Lie Theory.

Georgia Benkart is a leader in the representation theory of Lie algebras and Kac-Moody algebras with fundamental contributions to several branches of Lie Theory. In a series of joint papers with Osborn, she classified simple modular Lie algebras of toral rank one which proved to be a crucial building block for the classification of simple modular Lie algebras. Together with Britten and Lemire, she made important contributions to stability questions in combinatorial representation theory, a topic getting lots of attention recently. In a joint paper with E. Zelmanov, she found a highly nontrivial description of all root graded Lie algebras, which provided the key idea for really getting control of root graded Lie algebras. More recently, Benkart, Kang and Kashiwara constructed nice crystal bases for general linear Lie superalgebras, a highly nontrivial piece of work.

Besides her deep contributions in mathematics, she has been a very successful mentor with more than twenty Ph. D. students. She has contributed profusely to mathematics through her services as office bearer at the AMS as well as AWM.

Georgia Benkart got her PhD from Yale in 1974 and then took a position at the University of Wisconsin, where she got a Distinguished Teaching Award in 1987, and a Mid Career Faculty Research Award in 1996. She was Polya Lecturer of the MAA in 2000-2002 and 2014 Noether Lecturer at the Joint Mathematics Meeting.