August 13 ~ 21, 2014 Coex , Seoul , Korea



ICM-2014

Date of Release August 14, 2014

## **Emmy Noether Lecture**

The ICM Emmy Noether lecture honors women who have made fundamental and sustained contributions to the mathematical sciences.

Emmy Noether (March 23, 1882-April 14, 1935) was an influential German mathematician known for her ground-breaking contributions to abstract algebra and theoretical physics. She is also a symbol of female mathematician who withstood and stood out under the negative atmosphere against women.

On August 14th, the organizing committee of Seoul ICM 2014 will host the Emmy Noether Lecture at 6 p.m. at Hall D, COEX. 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 total 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, together with Kang and Kashiwara, she constructed nice crystal bases for general linear Lie superalgberas, 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 Ph.D. 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.

The Seoul ICM 2014 Public and Media Relations Committee

e-mail: news@icm2014.org