

## SEMINARIO DI GEOMETRIA

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Politecnico di Torino,  
Dipartimento di Scienze Matematiche,  
AULA BUZANO

**Natasha Rozhkovskaya**

(Kansas State University)

Feigin-Frenkel center

For a simple Lie algebra one can associate a family of vertex algebras, which are vacuum modules of the corresponding affine Lie algebras. At a critical level the center of such a vertex algebra is a nontrivial commutative associative subalgebra. B. Feigin and E. Frenkel proved in nineties that the center is a polynomial algebra in infinitely many generators, and only few years ago A. Molev found an approach that allowed to use the R-matrix techniques to construct the generators of Feigin-Frenkel center explicitly for classical Lie algebras.