Fomin-Kirillov algebras

Abstract:
Fomin-Kirillov algebras are certain quadratic algebras graded by the symmetric groups. They and related algebras have been introduced by Fomin and Kirillov in 1998. A particular subalgebra of the Fomin-Kirillov algebra is suitable for calculations with Schubert polynomials. Fomin-Kirillov algebras also appear naturally in the theory of pointed Hopf algebras. Nevertheless almost nothing is known about the structure of these algebras, not even their dimension or a linear basis. In the talk I will present some known facts and some new ideas.