

# Schubert varieties for Kac-Moody groups

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Let  $G$  be a simple complex algebraic group. We study Schubert subvarieties in the flag variety of  $G$  with respect to a Borel subgroup  $B$ . For classical groups, we proved that the tangent cones at the neutral point to the Schubert varieties corresponding to distinct involutions in the Weyl group do not coincide. The main technical tool we used is the so-called Kostant–Kumar polynomials (certain combinatorial objects related to the Weyl groups).

It turned out that these polynomials can help to solve a similar problem in the case of affine Kac–Moody groups. I will discuss the result in this direction and some open questions.

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