Pi-systems and closed systems in symmetrizable Kac-Moody algebras

Abstract:

Dynkin introduced the notion of pi-systems in the process of classifying semi-simple subalgebras of complex semi-simple Lie algebras. In a complex simple Lie algebra, pi-systems turn out to be the simple system of regular subalgebras. One can naturally generalize the notion of pi-systems to Kac-Moody algebras. In this talk, I will talk about the classification of maximal pi-systems of affine Kac-Moody algebras. If time permits, I will also talk about the Weyl orbits of certain interesting pi-systems.