Abstract

In this talk, we construct several classes of infinite dimensional Lie algebras of characteristic 0, which generalize the Lie algebras of Cartan type, Poisson type and Block type. Our construction is motivated by old and new constructions of algebraic operads. We associate these nonassociative algebras over binary quadratic operads to vertex algebras in a natural way. This is a joint work with Chengming Bai and Li Guo.