

October 18: Ivan Losev (MIT), “One-dimensional representations of W -algebras.”

W -algebras are certain associative algebras arising in Lie theory. Among their representations one-dimensional ones are especially interesting because of their connections to some classical questions in the representation theory of semisimple Lie algebras, both in zero and in positive characteristic. In this talk I will explain these connections as well as what is known about one-dimensional representations (existence, constructions and classification). No preliminary knowledge of W -algebras is required, all necessary facts will be recalled.