

September 30: Maria Gorelik (Weizmann Institute), “Shapovalov maps for Lie algebras with a ‘nice’ triangular decomposition.”

I will define Shapovalov map and Jantzen filtration for a Lie algebra with a “nice” triangular decomposition. I will discuss applications of these notions, including a criterion of existence of a self-extension of an irreducible highest weight module in terms of Jantzen filtration.