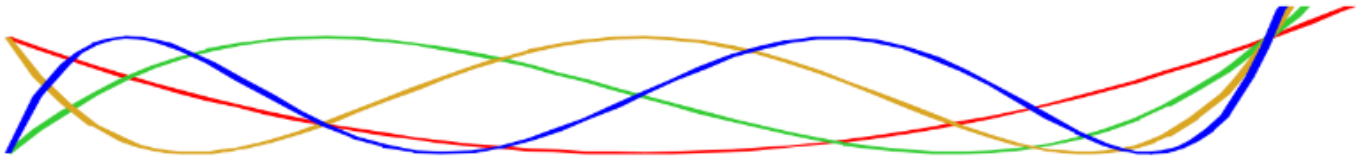

Algebraic groups seminar

September 21 (Monday) 13:00, zoom ID 675-315-555

Anastasia Stavrova (St. Petersburg State University)

«Isotropic reductive groups over Laurent polynomials»

Let k be a field of characteristic 0. Let G be a reductive group over the ring of Laurent polynomials $R=k[x_1^{\pm 1},...,x_n^{\pm 1}]$. We say that G is isotropic, if every semisimple normal subgroup of G contains $\mathbf{G}_{m,R}$. We settle in positive the conjecture of V. Chernousov, P. Gille, and A. Pianzola that $H^1_{Zar}(R,G)=*$ for isotropic loop reductive groups, and we conclude that every isotropic reductive R-group is loop reductive, i.e. contains a maximal R-torus. These results are proved in arXiv:1909.01984.

Everyone is welcome!