



Algebraic groups seminar

January 26 (Tuesday), 17:00, Zoom 675-315-555

Andrei Smolensky (SPbU)

"Root systems of type  $E_{\{k,n\}}$  "

We will discuss a construction of root systems of type  $E_{\{k,n\}}$  (including all finite simply-laced systems). This construction provides a simpler description for many objects related to these root systems (fundamental weights, affine roots, etc.) and explains various observed phenomena (monotonicity of root coefficients, some of the branching rules). We will discuss the ways one can arrive at this construction, in particular, we will relate it to Manin's "hyperbolic construction" of  $E_8$ .

Everyone is welcome!