

1048-20-193

George J McNinch* (mcninchg@member.ams.org), Department of Math, Tufts University, 503 Boston Ave, Medford, MA 02155. *Rational nilpotent orbits for a reductive group over a local field*. Preliminary report.

Let G be a semisimple group defined over a local field F , and suppose that the residual characteristic is very good for G . The talk will discuss the relationship between the $G(F)$ -orbits on nilpotent elements in $\text{Lie}(G)(F)$ with the nilpotent orbits of the special fibers of parahoric subgroup schemes attached to G . This relationship was first described by DeBacker when the residual characteristic p is sufficiently large; the talk will discuss how to relax the conditions on p . (Received February 07, 2009)