

1116-20-1432

**Nham Vo Ngo\*** ([nhamngo@math.arizona.edu](mailto:nhamngo@math.arizona.edu)), University of Arizona, Department of Mathematics, Tucson, AZ 85721. *On nilpotent commuting varieties and cohomology of Frobenius kernels.*

In this talk, we present some results on commuting varieties of nilpotent  $r$ -tuples in a classical Lie algebra  $\mathfrak{g}$  defined over an algebraically closed field  $k$ . These results are then used to obtain some information about the structure of the cohomology ring of Frobenius kernels  $G_r$  for each  $r \geq 1$ , where  $G$  is the simply connected, simple algebraic group such that  $\text{Lie}(G) = \mathfrak{g}$ . (Received September 19, 2015)