1139-22-409 Kayue Daniel Wong* (kayue.wong@cornell.edu), Department of Mathematics, Cornell University, Ithaca, NY 14853, and Dan Barbasch (barbasch@math.cornell.edu), Department of Mathematics, Cornell University, Ithaca, NY 14853. Admissible modules and normality of classical nilpotent orbits.

In the case of complex classical groups, we study (\mathfrak{g}, K) -modules with the property that their K-structure matches the structure of regular functions on the Zariski closures of nilpotent orbits.

In particular, we give a description on the decomposition of the ring of regular functions of the orbit closures into irreducible, algebraic modules. This verifies the conditions on the normality of such varieties given by Kraft and Procesi. (Received February 17, 2018)