1147-20-50 Vladimir Chernousov* (vladimir@ualberta.ca), Mathematical & Statistical Sciences Departmen, University of Alberta, Edmonton, Alberta T6G 2G1, Canada. The norm principle for groups of type D_n .

Joint work with N. Bhaskhar and A. Merkurjev. In the talk we will discuss the norm principle related to homomorphisms of algebraic groups to algebraic tori. This principle was used to study local-global principles for algebraic groups defined over arbitrary fields, rationality problem, R-equivalence classes, Serre's question on torsors with zero cycles of degree 1 and some other difficult questions related to arithmetic of algebraic groups. In the talk we will focus on groups of type D_n . This is the only classical type not covered by work of P. Barquero and A. Merkurjev going back to 2000. (Received November 14, 2018)