

Meeting: 1005, Newark, Delaware, SS 9A, Special Session on Arithmetic Groups and Related Topics

1005-20-38 **Mikhail V Ershov*** (mikhail.ershov@yale.edu), Yale University, Department of Mathematics, P.O. Box 208283, New Haven, CT 06520-8283. *Finite presentation of $SL_1(D)$* . Preliminary report. Several years ago Y. Barnea conjectured that if G is a connected, simply-connected, absolutely almost simple algebraic group, defined over a nonarchimedean local field F , then an open compact subgroup of $G(F)$ is finitely presented as a profinite group. If F has characteristic zero, this result is well known. Recently, Lubotzky established the conjecture for all *isotropic* groups. I will discuss the remaining case of *anisotropic* groups in positive characteristic. In this case, $G(F)$ is compact and isomorphic to the group $SL_1(D)$ of elements of reduced norm 1 in a finite dimensional division algebra D over F . (Received January 18, 2005)