

LINEAR GROUPS WITH THE MAXIMAL CONDITION ON SUBGROUPS OF INFINITE CENTRAL DIMENSION

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Abstract

Let A a vector space over a field F and let H be a subgroup of $\mathrm{GL}(F, A)$. We define $\mathrm{centdim}_F H$ to be $\dim_F(A/C_A(H))$. We say that H has *finite central dimension* if $\mathrm{centdim}_F H$ is finite and we say that H has *infinite central dimension* otherwise. We consider soluble linear groups, in which the (ordered by inclusion) set of all subgroups having infinite central dimension satisfies the maximal condition.

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