



R_∞ PROPERTY FOR CHEVALLEY GROUPS

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Let $\varphi : G \rightarrow G$ be an arbitrary automorphism of group G . Two elements x and y of group G are called φ -conjugated if there exists an element z in G , such that $x = zy\varphi(z^{-1})$. The relation of φ -conjugation is equivalence relation and here we can speak about φ -conjugacy classes. The number $R(\varphi)$ of φ -conjugacy classes is called the *Reidemeister number* of the automorphism φ . If the Reidemeister number $R(\varphi)$ is infinite for any automorphism φ of group G , then G is said to possess R_∞ property.

The question about the groups that possess R_∞ property was formulated by A. Felshtyn and R. Hill [1]. It is known that symplectic group $\mathrm{Sp}_{2n}(\mathbb{Z})$ over the ring of integers possesses R_∞ property [2]. Special and general linear groups $\mathrm{SL}_n(R)$, $\mathrm{GL}_n(R)$ over some integral domains also possess R_∞ property [3].

In this report we consider another class of linear groups – Chevalley groups over the field. And we discuss some sufficient conditions, when such groups possess R_∞ property.

REFERENCES

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