

Tate-Shafarevich kernel, weak Brauer and R -equivalence on connected reductive groups over local and global fields

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Abstract. We introduce a new equivalence relation on k -points of connected reductive groups over an arbitrary field, which coincides with the usual Brauer equivalence when the characteristic is 0, and study its relation with R -equivalence relation and other basic arithmetic-geometric invariants of the given group over local and global fields of any characteristic via some local-global exact sequences.

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