Intersection of Conjugacy Classes with Bruhat Cells in $SL_n(K)$, $GL_n(K)$

Nick Gordeev

Let $g \in G = SL_n(K), GL_n(K)$ and let C_g be a conjugacy class of g. Further, let $B\dot{w}B$ be a Bruhat cell. We give an answer on the following question : when $C_g \cap B\dot{w}B \neq \emptyset$. Some results for a general Chevalley group G are also considered.