1125-20-1857 **Dan Rossi***, 617 N Santa Rita Ave., PO Box 210089, Tucson, AZ 85721. *Rational Characters and Rational Conjugacy Classes in Finite Groups.*

Let G be a finite group. A character $\chi \in \mathrm{Irr}(G)$ is called *rational* if $\chi(g) \in \mathbb{Q}$ for every $g \in G$, and an element $g \in G$ is called *rational* if $\chi(g) \in \mathbb{Q}$ for every $\chi \in \mathrm{Irr}(G)$. If $g \in G$ is rational then we say the conjugacy class $cl_G(g)$ is rational. Write $\mathrm{Irr}_{\mathbb{Q}}(G)$ and $Cl_{\mathbb{Q}}(G)$, respectively, for the sets of rational irreducible characters and rational conjugacy classes of G. Extending work of Navarro-Tiep (2008) we show that when G is non-solvable either $|\mathrm{Irr}_{\mathbb{Q}}(G)| = 3$ if and only if $|Cl_{\mathbb{Q}}(G)| = 3$ or else the composition factors of G are under very tight control. (Received September 19, 2016)