1014-20-813 **Fedor Bogomolov** (bogomolo@cims.nyu.edu), 251 Mercer Street, New York, NY 10012, and **Jorge Maciel***, 199 Chambers Street, New York, NY 10007. *Simple Groups and $H^2(G, \mathbb{Q}/\mathbb{Z})$.*

We study the subgroup $B_0(G)$ of $H^2(G, \mathbb{Q}/\mathbb{Z})$ consisting of all elements which have trivial restrictions to every Abelian subgroup of G. It was shown that the group $B_0(G)$ serves as the simplest nontrivial obstruction to stable rationality of algebraic varieties V/G and coincides with geometric birational invariant of a smooth projective model $\widetilde{V/G}$ for V/G, the so-called *unramified Brauer group*, introduced earlier by Artin and Mumford, where G is a finite (algebraic) group and V is a faithful complex linear representation of G. This fact reduces the computation of the Artin-Mumford invariant V/G to a purely group-theoretical question. Bogomolov's Conjecture states that for any finite simple group G, $B_0(G) = 0$. We have proved that $B_0(G)$ is trivial for finite simple groups of Lie type A_ℓ. (Received September 24, 2005)