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Kai Behrend and **Ajneet Dhillon*** (adh1113@uwo.ca), Department of Mathematics, Middlesex College, The University of Western Ontario, London, Ontario N6A 5B7, Canada. *The motive of the stack of bundles.*

Let G be a split connected semisimple group over a field. We give a conjectural formula for the motivic class of the stack of G -bundles over a curve C , in terms of special values of the motivic zeta function of C . The formula is true if $C = P^1$ or $G = SL_n$. If $k = \mathbb{C}$, upon applying the Poincaré or called the Serre characteristic by some authors the formula reduces to results of Teleman and Atiyah-Bott on the gauge group. If $k = \mathbb{F}_q$, upon applying the counting measure, it reduces to the fact that the Tamagawa number of G over the function field of C is $|\pi_1(G)|$. (Received December 20, 2006)