

1096-14-2405

Alexander Soibelman* (asoibel@live.unc.edu), UNC Phillips Hall, Mathematics Dept #3250, Chapel Hill, NC 27599. *The moduli stack of parabolic bundles and the additive Deligne-Simpson problem.*

The "very good" property for smooth complex equidimensional algebraic stacks was introduced by Beilinson and Drinfeld in their paper "The Quantization of Hitchin's Integrable System and Hecke Eigensheaves". They proved that for a semisimple complex group G , the moduli stack of G -bundles over a smooth complex projective curve X is "very good" as long as X has genus g greater than 1. We will define the "very good" property for algebraic stacks and prove it for the moduli stack of parabolic bundles over \mathbb{P}^1 . As a special case, we will consider the "very good" property for the quotient stack arising from the diagonal action of the group $\mathrm{PGL}(n)$ on a product of partial flag varieties and its relationship with the space of solutions to the additive Deligne-Simpson problem. (Received September 17, 2013)