Jim Brown* (jimlb@clemson.edu). Eisenstein series on GU(3,3) and non-trivial torsion in Shafarevich-Tate groups.

Applications of recent work of Pitale-Saha-Schmidt on a pullback formula from GU(3,3) to $GSp(4) \times GL(2)$ will be discussed. In particular, we will outline how one can use this formula to give a lower bound on a particular twist of a Shafarevich-Tate group attached to a two dimensional modular Galois representation. (Received August 02, 2011)