1078-11-359   **Jim Brown*** (`jimlb@clemson.edu`), Department of Mathematical Sciences, Clemson University, Clemson, SC 29634, and **Krzysztof Klosin** (`krzysztof.klosin@qc.cuny.edu`). *The CAP ideal and applications.*

Given an automorphic form on GSp(4) that is CAP with respect to the Siegel parabolic, one can define an associated CAP ideal that measures congruences between this automorphic form and non-CAP forms. This ideal is analogous to the Eisenstein ideal in the GL(2) theory. We will discuss the definition of this ideal as well as some applications to bounding certain Selmer groups. The results on Selmer groups are analogous to the recent results of Skinner-Urban where they use the Klingen-Eisenstein ideal to produce their results. (Received December 13, 2011)