A. Raghuram* (araghur@math.okstate.edu), Department of Mathematics, 401 Mathematical Sciences, Oklahoma State University, Stillwater, OK 74078. Eisenstein cohomology and special values of Rankin-Selberg L-functions.

I will introduce the notion of Eisenstein cohomology and show how one can use it to prove algebraicity results for ratios of successive critical values for the Rankin-Selberg L-functions for $GL(n) \times GL(m)$ under the parity restriction that n+m is odd. This is joint work with Guenter Harder, and it generalizes previous work of Harder in the case of $GL(2) \times GL(1)$, and complements my own results on $GL(n) \times GL(n-1)$. (Received January 16, 2011)