Meeting: 1005, Newark, Delaware, SS 9A, Special Session on Arithmetic Groups and Related Topics

1005-20-37 **Kai-Uwe Bux** and **Kevin Wortman*** (wortman@math.cornell.edu). *Finiteness properties of arithmetic groups over function fields.*

Let K be a global function field, $\mathcal{O}_S$ a ring of S-integers in K, and $\mathbf{G}$ a reductive K-group. In this talk I will describe a proof that the arithmetic group $\mathbf{G}(\mathcal{O}_S)$ is of type FP_∞ if and only if the semisimple K-rank of $\mathbf{G}$ equals 0. Our proof is motivated by the Epstein-Thurston proof that $\mathbf{SL}_3(\mathbb{Z})$ has a quadratic Dehn function. (Received January 18, 2005)