1053-52-113   **Stefan Witzel*** (`switzel@mathematik.tu-darmstadt.de`), Schlossgartenstrasse 7, Darmstadt, 64293. *Finiteness properties of $\mathcal{G}(\mathbb{F}_q[t])$.*

We show that if $\mathcal{G}$ is an isotropic, absolutely almost simple group of rank n defined over $\mathbb{F}_q$, then the arithmetic lattice $\mathcal{G}(\mathbb{F}_q[t])$ in $\mathcal{G}(\mathbb{F}_q((t)))$ is of topological finiteness type F_{n-1}. The method is to use simplicial Morse theory on the Euclidean twin building associated to $\mathcal{G}(\mathbb{F}_q[t, t^{-1}])$.

In the case where $\mathcal{G}$ is a classical group and q is large compared to n, the result is due to P. Abramenko and (in the case A_n) H. Abels. (Received September 01, 2009)