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

1005-20-40 Kai-Uwe Bux*, Department of Mathematics, University of Virginia, P.O. Box 400137 (Kerchof Hall), Charlottesville, VA 22904-4137, and Kevin Wortman. A geometric proof that $SL_2(\mathbf{Z}[t, t^{-1}])$ is not finitely presented.

We give a geometric proof for the result of Krstić-McCool from the title. We study the action of $SL_2(\mathbf{Z}[t, t^{-1}])$ on the product of two Bruhat-Tits trees associated with $SL_2(\mathbf{Q}(t))$ using techniques from the study finiteness properties of arithmetic groups over global function fields. (Received January 18, 2005)