

Sara LAMBOGLIA : *Fixed point sets in B-T buildings*

Abstract. In this talk I am going to discuss some results on fixed point set of the B-T buildings of $\mathrm{SL}(V)$. Firstly I will show that in certain cases the fixed point set of an element of SL_n can be described using tropical geometry. This will lead to determine completely the fixed point sets which can be “included” in a single apartment in the sense that it is sufficient to look at one apartment to determine it. Finally I will present some results on the inverse problem : given a convex set in $B(\mathrm{SL}(V))$, find whether it is the fixed point set of an element in $\mathrm{SL}(V)$. This is joint work with Annette Werner.