Kostant's Convexity Theorem for affine buildings

Petra Hitzelberger

There are many versions of Kostant's Convexity Theorem which originally was proven for semisimple Lie-Groups. We show a similar theorem for affine buildings involving two different retractions onto a fixed appartment. The problem can be reduced to a problem in Coxeter complexes, the proof uses a character formula for highest weight representations of algebraic groups.