Prop. For $G$ is the parabolic subgroup $W_I$.

We can still get a Coxeter complex.

What if $W$ is infinite?

$W_I \Delta G = \{ x \in G : x \Delta g = x \}$

Set of what? 

(a simplicial complex)

Thus, $\langle , \rangle$ is not positive definite.

Not achievable in Euclidean space.

$\langle x, x \rangle = 0$ for all $x$ implies $x = 0$.

So $\langle 0, 0 \rangle = 0$.

$\langle 0, 0 \rangle = 0$ $\Rightarrow$ $\langle x, x \rangle = 0$ $\Rightarrow$ $x = 0$.

We still have a Coxeter complex.

To see the problem:

But a bit differently.

W.

So I can think:

$W_I$.

There is a maximal proper subset $W_1$ with nonempty $\mathfrak{A}$.
(2) \( C = \{ x \in V | \langle x, x \rangle > 0, \langle x, x \rangle > 0 \} = \emptyset \)

Instead of action of \( W \) on \( V \), consider the "contragredient action" of \( W \) on \( V^* \):
\( V^* = \) vector space of linear forms on \( V \).
\( f: V^* \to W \) characterized by
\( w_f(wv) = f(v) \) for all \( v \in V \).

\( \exists \ V : \beta \)

\( \begin{align*}
\alpha x &= -\alpha \\
\beta &= \beta + 2\alpha \\
\beta &= -\beta
\end{align*} \)
\( \Rightarrow \begin{align*}
\alpha A &= -A + 4B \\
\beta A &= A \\
\beta &= B \\
bB &= A - B
\end{align*} \)

\( D = \{ f \in V^* | f(\alpha) > 0, f(\beta) > 0 \} \) fundamental domain

\( U = U \cap D \)

\( \text{Tits cone} \)