

$$\bigcirc \subset \text{sing} \left(\mathbb{R}_{\underline{\mathbb{H}}_-}^{\sharp \bullet} \right) = \mathbb{R}_{\underline{\mathbb{H}}_-}^{\bullet} |_{> \underline{\mathbb{H}}}^{\mathbb{C}_{\sharp} \bullet} \sqcup 0$$

$$|\bigcirc| = r$$

2^r choices $\bullet \subset \odot \subset \bigcirc$ prim pos roots

$$\mathbb{R}_{\odot \underline{\mathbb{H}}}^{\bullet} = \frac{\mathfrak{t} \in \mathbb{R}_{\underline{\mathbb{H}}_-}^{\bullet}}{\mathfrak{t} | \odot = 0}$$

$$\mathbb{R}_{\bigcirc \underline{\mathbb{H}}}^{\bullet} = 0$$

$$\mathbb{R}_{\underline{\mathbb{H}}} = \mathbb{R}_{\underline{\mathbb{H}}}^{\bullet} \times \mathbb{R}_{\odot \underline{\mathbb{H}}}^{\bullet} \times \sum_{< \odot > \ni 1 \in \mathbb{R}_{\underline{\mathbb{H}}_-}^{\sharp \bullet}} \mathbb{R}_{\mathfrak{t} \underline{\mathbb{H}}}^{\bullet}$$

$$\mathbb{R}_{\odot \underline{\mathbb{H}}}^{\bullet} = \mathbb{R}_{\underline{\mathbb{H}}} \cap \sum_{< \odot > \ni 1 \in \mathbb{R}_{\underline{\mathbb{H}}_-}^{\bullet} | 1} \mathbb{C}_{\underline{\mathbb{H}}_1}^{\bullet} = \sum_{1 \in < \odot >} \mathbb{R}_{\mathfrak{t} \underline{\mathbb{H}}}^{\bullet} = \mathbb{R}_{\cdot \underline{\mathbb{H}}}^{\bullet} \times \sum_{0 \neq 1 \in < \odot >} \mathbb{R}_{\mathfrak{t} \underline{\mathbb{H}}}^{\bullet}$$

$$\mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet} = \mathbb{R}_{\underline{\mathbb{H}}}^{\bullet} \times \mathbb{R}_{\odot \underline{\mathbb{H}}}^{\bullet} = \mathbb{R}_{\mathfrak{t} \underline{\mathbb{H}}}^{\odot} \times \mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet} = \mathbb{R}_{\underline{\mathbb{H}}_-}^{\bullet} \times \sum_{0 \neq 1 \in < \odot >} \mathbb{R}_{\mathfrak{t} \underline{\mathbb{H}}}^{\bullet}$$

$$\mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet} \max_{\substack{\exists \\ \text{abel}}} \mathbb{R}_{\underline{\mathbb{H}}}^{\odot} = \mathbb{R}_{\underline{\mathbb{H}}_1}^{\odot} \times \mathbb{R}_{\underline{\mathbb{H}}_-}^{\odot}$$

$$\mathbb{R}_{\underline{\mathbb{H}}_-}^{\bullet} = \mathbb{R}_{\mathfrak{t} \underline{\mathbb{H}}}^{\bullet} \times \mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet} \times \frac{\mathbb{R}_{\underline{\mathbb{H}}_-}^{\bullet}}{\mathbb{R}_{\odot \underline{\mathbb{H}}}^{\bullet}}$$

$$\mathbb{R}_{\underline{\mathbb{H}}} = \mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet} \times \mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet} \times \mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet} = \mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet} \times \mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet}$$

$$\mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet} = \sum_{< \odot > \ni 1 \in \mathbb{C}_{\underline{\mathbb{H}}_-}^{\bullet} | \mathbb{C}_{\sharp}^{\bullet}} \mathbb{R}_{\mathfrak{t} \underline{\mathbb{H}}}^{\bullet}$$

$$\mathbb{R}_{\bigcirc \underline{\mathbb{H}}_-}^{\bullet} = 0$$

$$\mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet} = \mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet} \times \mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet} \text{ bolic cusp parabolic}$$

$$\mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet} = \mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet} = \mathbb{R}_{\underline{\mathbb{H}}} \text{ maxibolic}$$

$$\mathbb{R}_{\mathfrak{t} \underline{\mathbb{H}}}^{\odot} = \frac{\mathbb{R}_{\odot \underline{\mathbb{H}}_-}^{\bullet}}{\mathbb{R}_{\odot \underline{\mathbb{H}}}^{\bullet}} = \frac{\mathbb{R}_{\underline{\mathbb{H}}}^{\bullet}}{\mathbb{R}_{\odot \underline{\mathbb{H}}}^{\bullet}} \times \mathbb{R}_{\odot \underline{\mathbb{H}}}^{\bullet} = \frac{\mathbb{R}_{\underline{\mathbb{H}}_-}^{\bullet}}{\mathbb{R}_{\odot \underline{\mathbb{H}}}^{\bullet}} \times \mathbb{R}_{\mathfrak{t} \underline{\mathbb{H}}}^{\bullet} \times \sum_{0 \neq 1 \in < \odot >} \mathbb{R}_{\mathfrak{t} \underline{\mathbb{H}}}^{\bullet}$$

$$\frac{\mathbb{R}\underline{\mathbb{H}}^\bullet}{\mathbb{R}\underline{\mathbb{H}}^\bullet} \times \mathbb{R}\underline{\mathbb{H}}^\bullet = \frac{\mathbb{R}\underline{\mathbb{H}}^\bullet}{\mathbb{R}\underline{\mathbb{H}}^\bullet} \times \mathbb{R}\underline{\mathbb{H}}^\bullet \times \mathbb{R}\underline{\mathbb{H}}^\bullet = \frac{\mathbb{R}\underline{\mathbb{H}}^\bullet}{\mathbb{R}\underline{\mathbb{H}}^\bullet} \times \mathbb{R}\underline{\mathbb{H}}^\bullet$$

$$\mathbb{R}\underline{\mathbb{H}}^\odot \max_{\text{abel}} \mathbb{R}\underline{\mathbb{H}}_1^\odot \text{ cpt}$$

$$\mathbb{R}\underline{\mathbb{H}}^\odot = \mathbb{R}\underline{\mathbb{H}}_1^\odot \max_{\text{abel}} \mathbb{R}\underline{\mathbb{H}}^\bullet = \mathbb{R}\underline{\mathbb{H}}^\bullet \times \mathbb{R}\underline{\mathbb{H}}^\bullet = \mathbb{R}\underline{\mathbb{H}}^\bullet \times \mathbb{R}\underline{\mathbb{H}}^\bullet \times \sum_{0 \neq 1} \mathbb{R}\underline{\mathbb{H}}^\bullet = \mathbb{R}\underline{\mathbb{H}}$$