

## Toledano-Laredo @ GRT: Quasi-Coxeter algebras

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Casimir connection:  $\mathfrak{g} : \mathfrak{ss}$  Lie alg /  $\mathbb{C}$

$$\cup$$

$$\mathfrak{h}$$

$$\cup$$

$$\mathfrak{h}_{\text{reg}} = \mathfrak{h} \setminus \bigcup_{\alpha} \ker(\alpha)$$

$$\nabla_C = d - \mathfrak{h} \sum_{\alpha > 0} \frac{d\alpha}{\alpha} K_{\alpha} \quad \text{on } \begin{array}{l} \text{trivial bundle} \\ \text{w/ fiber} \\ \checkmark \text{ fid. rep of } \mathfrak{g} \end{array}$$

where  $K_{\alpha} = \text{Casimir of } \mathfrak{sl}_2^{\alpha} \subseteq \mathfrak{g}$  corr. to  $\alpha$ .