

$$\mathbb{T}_\infty \triangleright \overline{\mathbb{T}_\infty \triangleleft \mathbb{R}^n \times_n \mathbb{R}^n} \ni \mathcal{A} : \mathcal{A}$$

$$d*\mathbb{H} - \underbrace{\mathcal{A} * *\mathbb{H} - (-1)*\mathbb{H} * \mathcal{A}} = 0$$

$$d*_i\mathbb{H}^j - \underbrace{\mathcal{A}_i^k * *_k\mathbb{H}^j - (-1)*_i\mathbb{H}^k * \mathcal{A}_k^j} = 0$$

$$\mathcal{L}_{\mathcal{A}} \mathcal{A} \ni \text{tr } \mathcal{A} * \overbrace{d*\mathbb{H} - \mathcal{A} * *\mathbb{H} - (-1)*\mathbb{H} * \mathcal{A}}$$

$$\begin{aligned} \mathcal{L}_{\mathcal{A}} \mathcal{A} &= {}_i\mathbb{H}^j * \overbrace{d\mathcal{A}_j^i - \mathcal{A}_j^k * \mathcal{A}_k^i + \mathcal{A}_j^k * \mathcal{A}_k^i} \ni - \mathcal{A}_j^k * \mathcal{A}_k^i * \underbrace{*_i\mathbb{H}^j} + \mathcal{A}_j^i * \underbrace{d*_i\mathbb{H}^j} - \mathcal{A}_j^k * \mathcal{A}_k^i * \underbrace{*_i\mathbb{H}^j} \\ &= \binom{n-1}{-1} \mathcal{A}_k^i * *_i\mathbb{H}^j * \mathcal{A}_j^k + \mathcal{A}_j^i * \underbrace{d*_i\mathbb{H}^j} - \mathcal{A}_j^k * \underbrace{\mathcal{A}_k^i * *\mathbb{H}^j}_k \\ &= \binom{n-1}{-1} \mathcal{A}_k^i * \underbrace{*\mathbb{H}^k * \mathcal{A}_i^j}_i + \mathcal{A}_j^i * \underbrace{d*_i\mathbb{H}^j} - \mathcal{A}_j^k * \underbrace{\mathcal{A}_k^i * *\mathbb{H}^j}_k \end{aligned}$$