

$$\left\{ \mathcal{A}_{ka}^i h_j^a - \mathcal{A}_{ja}^i h_k^a + \right. \\ \left. h_j^a h_k^{a1} \partial_{ab}^i{}_{a1} - h_j^a h_k^{a1} \partial_{a1b}^i{}_a, \text{TP2p}[-i, -j], \right. \\ \left. \frac{1}{2} \pi_{\mathcal{A}ja1}{}^b b_i^a \wedge \gamma_{ab} n^{a1} - \frac{1}{2} \pi_{\mathcal{A}ia1}{}^b b_j^a \wedge \gamma_{ab} n^{a1} \right\}$$