

$$\left\{ \mathcal{A}_{ka}^i h_j^a - \mathcal{A}_{ja}^i h_k^a + h_j^a h_k^{a'} \partial_a b_{a'}^i - h_j^a h_k^{a'} \partial_{a'} b_{a'}^i, \right.$$

$$\left. b^{aa'} \pi_b^b \gamma_{a'b}^\parallel, -\frac{1}{2} \pi_{\mathcal{A}}^{ja'} b_i^b \gamma_{ab}^\parallel h^{a'} - \frac{1}{2} \pi_{\mathcal{A}}^{ia'} b_j^b \gamma_{ab}^\parallel h^{a'} \right\}$$