

$$\begin{aligned}
& \left\{ -\frac{1}{2} \mathcal{A}_j^{b1c} \pi_{\mathcal{A}bb1}^{c1} b_i^a \hat{\gamma}_{ac1} \hat{\gamma}_{a1c} h_z^{a1} n^b + \right. \\
& -\frac{1}{2} \mathcal{A}_i^{b1c} \pi_{\mathcal{A}bb1}^{c1} b_j^a \hat{\gamma}_{ac1} \hat{\gamma}_{a1c} h_z^{a1} n^b - \\
& -\frac{1}{2} \mathcal{A}_{ja}^c \pi_{\mathcal{A}ib1}^{c1} b^{aa1} \hat{\gamma}_{a1c1} \hat{\gamma}_{bc} h_z^b n^{b1} + \\
& -\frac{1}{2} \mathcal{A}_{ia}^c \pi_{\mathcal{A}jb1}^{c1} b^{aa1} \hat{\gamma}_{a1c1} \hat{\gamma}_{bc} h_z^b n^{b1} - \\
& -\frac{1}{2} \mathcal{A}_b^{cc1} \pi_{\mathcal{A}b1c}^d b_j^a \hat{\gamma}_{ad} \hat{\gamma}_{a1c1} h_z^{a1} n^b n^{b1} n_i + \\
& -\frac{1}{2} \mathcal{A}_{ab1}^{c1} \pi_{\mathcal{A}jc}^d b^{aa1} \hat{\gamma}_{a1d} \hat{\gamma}_{bc1} h_z^b n^{b1} n^c n_i + \\
& -\frac{1}{2} \mathcal{A}_b^{cc1} \pi_{\mathcal{A}b1c}^d b_i^a \hat{\gamma}_{ad} \hat{\gamma}_{a1c1} h_z^{a1} n^b n^{b1} n_j - \\
& -\frac{1}{2} \mathcal{A}_{ab1}^{c1} \pi_{\mathcal{A}ic}^d b^{aa1} \hat{\gamma}_{a1d} \hat{\gamma}_{bc1} h_z^b n^{b1} n^c n_j + \\
& -\frac{1}{2} \mathcal{A}_j^{cc1} \pi_{\mathcal{A}b1c}^d b_i^a \hat{\gamma}_{ad} \hat{\gamma}_{bc1} h^{a1b} n_{a1} n^{b1} n_z - \\
& -\frac{1}{2} \mathcal{A}_i^{cc1} \pi_{\mathcal{A}b1c}^d b_j^a \hat{\gamma}_{ad} \hat{\gamma}_{bc1} h^{a1b} n_{a1} n^{b1} n_z + \\
& -\frac{1}{2} \mathcal{A}_{ja}^{c1} \pi_{\mathcal{A}ic}^d b^{aa1} \hat{\gamma}_{a1d} \hat{\gamma}_{b1c1} h^{bb1} n_b n^c n_z - \\
& -\frac{1}{2} \mathcal{A}_{ia}^{c1} \pi_{\mathcal{A}jc}^d b^{aa1} \hat{\gamma}_{a1d} \hat{\gamma}_{b1c1} h^{bb1} n_b n^c n_z + \\
& -\frac{1}{2} \mathcal{A}_{b1}^{c1d} \pi_{\mathcal{A}cc1}^{d1} b_j^a \hat{\gamma}_{ad1} \hat{\gamma}_{bd} h^{a1b} \\
& n_{a1} n^{b1} n^c n_i n_z - \frac{1}{2} \mathcal{A}_{ac}^d \pi_{\mathcal{A}jc1}^{d1} b^{aa1} \\
& \hat{\gamma}_{a1d1} \hat{\gamma}_{b1d} h^{bb1} n_b n^c n^{c1} n_i n_z - \\
& -\frac{1}{2} \mathcal{A}_{b1}^{c1d} \pi_{\mathcal{A}cc1}^{d1} b_i^a \hat{\gamma}_{ad1} \hat{\gamma}_{bd} h^{a1b} \\
& n_{a1} n^{b1} n^c n_j n_z + \frac{1}{2} \mathcal{A}_{ac}^d \pi_{\mathcal{A}ic1}^{d1} b^{aa1} \\
& \hat{\gamma}_{a1d1} \hat{\gamma}_{b1d} h^{bb1} n_b n^c n^{c1} n_j n_z + \\
& -\frac{1}{2} \pi_{\mathcal{A}ja1}^c \hat{\gamma}_{ab1} \hat{\gamma}_{bc} h_z^a n^{a1} \partial^{b1} b_i^b - \\
& -\frac{1}{2} \pi_{\mathcal{A}ia1}^c \hat{\gamma}_{ab1} \hat{\gamma}_{bc} h_z^a n^{a1} \partial^{b1} b_j^b - \\
& -\frac{1}{2} b_j^a \hat{\gamma}_a^{b1} \hat{\gamma}_{a1}^c h_z^{a1} n^b \partial_c \pi_{\mathcal{A}ibb1} + \\
& -\frac{1}{2} b_i^a \hat{\gamma}_a^{b1} \hat{\gamma}_{a1}^c h_z^{a1} n^b \partial_c \pi_{\mathcal{A}jbb1} - \\
& -\frac{1}{2} \pi_{\mathcal{A}jb}^{c1} \hat{\gamma}_{ac} \hat{\gamma}_{b1c1} h_z^a n^{a1} n^b n_i \partial^c b_{a1}^{b1} + \\
& -\frac{1}{2} \pi_{\mathcal{A}ib}^{c1} \hat{\gamma}_{ac} \hat{\gamma}_{b1c1} h_z^a n^{a1} n^b n_j \partial^c b_{a1}^{b1} - \\
& -\frac{1}{2} \pi_{\mathcal{A}jb}^{c1} \hat{\gamma}_{a1c} \hat{\gamma}_{b1c1} h^{aa1} n_a n^b n_z \partial^c b_i^{b1} + \\
& -\frac{1}{2} \pi_{\mathcal{A}ib}^{c1} \hat{\gamma}_{a1c} \hat{\gamma}_{b1c1} h^{aa1} n_a n^b n_z \partial^c b_j^{b1} + \\
& -\frac{1}{2} b_j^a \hat{\gamma}_a^c \hat{\gamma}_b^{c1} h^{a1b} n_{a1} n^{b1} n_z \partial_{c1} \pi_{\mathcal{A}ib1c} - \\
& -\frac{1}{2} b_i^a \hat{\gamma}_a^c \hat{\gamma}_b^{c1} h^{a1b} n_{a1} n^{b1} n_z \partial_{c1} \pi_{\mathcal{A}jb1c} + \\
& -\frac{1}{2} \pi_{\mathcal{A}jb1}^d \hat{\gamma}_{a1c1} \hat{\gamma}_{cd} h^{aa1} n_a n^b \\
& n^{b1} n_i n_z \partial^{c1} b_b^c - \frac{1}{2} \pi_{\mathcal{A}ib1}^d \hat{\gamma}_{a1c1} \\
& \hat{\gamma}_{cd} h^{aa1} n_a n^b n^{b1} n_j n_z \partial^{c1} b_b^c - \\
& -\frac{1}{2} \pi_{\mathcal{A}jb}^d b_i^a \hat{\gamma}_{ad} \hat{\gamma}_{a1c1} h^{bb1} h_z^{a1} n^c \partial^{c1} b_{cb1} + \\
& -\frac{1}{2} \pi_{\mathcal{A}ib}^d b_j^a \hat{\gamma}_{ad} \hat{\gamma}_{a1c1} h^{bb1} h_z^{a1} n^c \partial^{c1} b_{cb1} + \\
& -\frac{1}{2} \pi_{\mathcal{A}jc1}^{d1} b_i^a \hat{\gamma}_{ad1} \hat{\gamma}_{a1d} h^{bb1} h_z^{a1} n_b n^c \\
& n^{c1} \partial^d b_{cb1} - \frac{1}{2} \pi_{\mathcal{A}ic1}^{d1} b_j^a \hat{\gamma}_{ad1} \hat{\gamma}_{a1d} h^{bb1} \\
& h_z^{a1} n_b n^c n^{c1} \partial^d b_{cb1} + \frac{1}{2} \pi_{\mathcal{A}bc1}^{d1} b_j^a \\
& \hat{\gamma}_{ad1} \hat{\gamma}_{a1d} h^{bb1} h_z^{a1} n^c n^{c1} n_i \partial^d b_{cb1} - \\
& -\frac{1}{2} \pi_{\mathcal{A}bc1}^{d1} b_i^a \hat{\gamma}_{ad1} \hat{\gamma}_{a1d} h^{bb1} h_z^{a1} n^c \\
& n^{c1} n_j \partial^d b_{cb1} + \frac{1}{2} \pi_{\mathcal{A}jb1}^{d1} b_i^a \hat{\gamma}_{ad1} \hat{\gamma}_{bd} \\
& h^{a1b} h^{b1c} n_{a1} n^{c1} n_z \partial^d b_{c1c} - \frac{1}{2} \pi_{\mathcal{A}ib1}^{d1} \\
& b_j^a \hat{\gamma}_{ad1} \hat{\gamma}_{bd} h^{a1b} h^{b1c} n_{a1} n^{c1} n_z \partial^d b_{c1c} - \\
& -\frac{1}{2} \pi_{\mathcal{A}jd}^e b_i^a \hat{\gamma}_{ae} \hat{\gamma}_{cd1} h^{a1b} h^{b1c} n_{a1} n^{b1} \\
& n^{c1} n^d n_z \partial^{d1} b_{c1b} + \frac{1}{2} \pi_{\mathcal{A}id}^e b_j^a \hat{\gamma}_{ae} \hat{\gamma}_{cd1} \\
& h^{a1b} h^{b1c} n_{a1} n^{b1} n^{c1} n^d n_z \partial^{d1} b_{c1b} - \\
& -\frac{1}{2} \pi_{\mathcal{A}b1d}^e b_j^a \hat{\gamma}_{ae} \hat{\gamma}_{bd1} h^{a1b} h^{b1c} n_{a1} \\
& n^{c1} n^d n_i n_z \partial^{d1} b_{c1c} + \frac{1}{2} \pi_{\mathcal{A}b1d}^e b_i^a \hat{\gamma}_{ae} \\
& \hat{\gamma}_{bd1} h^{a1b} h^{b1c} n_{a1} n^{c1} n^d n_j n_z \partial^{d1} b_{c1c} \}
\end{aligned}$$