

$$\begin{aligned}
& \frac{1}{2} \mathcal{A}_a^{a1} i \mathcal{A}_{ba1c} - \frac{1}{2} \mathcal{A}_a^{a1} c \mathcal{A}_{ba1i} + \\
& \frac{1}{12} b_{ai} b_{bc} \overset{0^+}{\mathcal{R}}^{\parallel} - \frac{1}{12} b_{ac} b_{bi} \overset{0^+}{\mathcal{R}}^{\parallel} - \\
& \frac{1}{2} b^{a1} i b_{bc} \overset{1^+}{\mathcal{R}}^{\parallel} a a 1 + \frac{1}{2} b^{a1} c b_{bi} \overset{1^+}{\mathcal{R}}^{\parallel} a a 1 - \\
& \frac{1}{2} b_{ai} b^{a1} c \overset{1^+}{\mathcal{R}}^{\parallel} b a 1 + \frac{1}{2} b_{ac} b^{a1} i \overset{1^+}{\mathcal{R}}^{\parallel} b a 1 + \\
& \frac{1}{2} b^{a1} i b_{bc} \overset{2^+}{\mathcal{R}}^{\parallel} a a 1 - \frac{1}{2} b^{a1} c b_{bi} \overset{2^+}{\mathcal{R}}^{\parallel} a a 1 + \\
& \frac{1}{2} b_{ai} b^{a1} c \overset{2^+}{\mathcal{R}}^{\parallel} b a 1 - \frac{1}{2} b_{ac} b^{a1} i \overset{2^+}{\mathcal{R}}^{\parallel} b a 1 + \\
& \frac{1}{12} b^{a1} c b^{b1} i \hat{\epsilon}_{ba1b1} \overset{0^-}{\mathcal{R}}^{\parallel} n_a + \frac{1}{4} b^{a1} i b_{bc} \overset{1^-}{\mathcal{R}}^{\parallel} a 1 n_a - \\
& \frac{1}{4} b^{a1} c b_{bi} \overset{1^-}{\mathcal{R}}^{\parallel} a 1 n_a - \frac{2}{3} b^{a1} c b^{b1} i \overset{2^-}{\mathcal{R}}^{\parallel} a 1 b 1 b n_a - \\
& \frac{1}{12} b^{a1} c b^{b1} i \hat{\epsilon}_{abb1} \overset{0^-}{\mathcal{R}}^{\perp} n_{a1} + \\
& \frac{1}{4} b^{a1} i b_{bc} \overset{1^-}{\mathcal{R}}^{\perp} a n_{a1} - \frac{1}{4} b^{a1} c b_{bi} \overset{1^-}{\mathcal{R}}^{\perp} a n_{a1} + \\
& \frac{1}{4} b_{ai} b^{a1} c \overset{1^-}{\mathcal{R}}^{\perp} b n_{a1} - \frac{1}{4} b_{ac} b^{a1} i \overset{1^-}{\mathcal{R}}^{\perp} b n_{a1} + \\
& \frac{2}{3} b^{a1} c b^{b1} i \overset{2^-}{\mathcal{R}}^{\perp} a b b 1 n_{a1} - \\
& \frac{1}{12} b^{a1} i b_{bc} \overset{0^+}{\mathcal{R}}^{\parallel} n_a n_{a1} + \frac{1}{12} b^{a1} c b_{bi} \overset{0^+}{\mathcal{R}}^{\parallel} n_a n_{a1} - \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{1^+}{\mathcal{R}}^{\parallel} b b 1 n_a n_{a1} + \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{2^+}{\mathcal{R}}^{\parallel} b b 1 n_a n_{a1} + \\
& \frac{1}{6} b^{a1} i b_{bc} \overset{0^+}{\mathcal{R}}^{\perp} n_a n_{a1} - \frac{1}{6} b^{a1} c b_{bi} \overset{0^+}{\mathcal{R}}^{\perp} n_a n_{a1} + \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{1^+}{\mathcal{R}}^{\perp} b b 1 n_a n_{a1} + \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{2^+}{\mathcal{R}}^{\perp} b b 1 n_a n_{a1} - \\
& \frac{1}{12} b^{a1} c b^{b1} i \hat{\epsilon}_{aa1b1} \overset{0^-}{\mathcal{R}}^{\parallel} n_b + \\
& \frac{1}{4} b_{ai} b^{a1} c \overset{1^-}{\mathcal{R}}^{\parallel} a 1 n_b - \frac{1}{4} b_{ac} b^{a1} i \overset{1^-}{\mathcal{R}}^{\parallel} a 1 n_b + \\
& \frac{2}{3} b^{a1} c b^{b1} i \overset{2^-}{\mathcal{R}}^{\parallel} a 1 b 1 a n_b - \\
& \frac{1}{12} b_{ai} b^{a1} c \overset{0^+}{\mathcal{R}}^{\parallel} n_{a1} n_b + \frac{1}{12} b_{ac} b^{a1} i \overset{0^+}{\mathcal{R}}^{\parallel} n_{a1} n_b + \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{1^+}{\mathcal{R}}^{\parallel} a b 1 n_{a1} n_b - \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{2^+}{\mathcal{R}}^{\parallel} a b 1 n_{a1} n_b + \\
& \frac{1}{6} b_{ai} b^{a1} c \overset{0^+}{\mathcal{R}}^{\perp} n_{a1} n_b - \frac{1}{6} b_{ac} b^{a1} i \overset{0^+}{\mathcal{R}}^{\perp} n_{a1} n_b - \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{1^+}{\mathcal{R}}^{\perp} a b 1 n_{a1} n_b - \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{2^+}{\mathcal{R}}^{\perp} a b 1 n_{a1} n_b + \\
& \frac{1}{12} b^{a1} c b^{b1} i \hat{\epsilon}_{aba1} \overset{0^-}{\mathcal{R}}^{\perp} n_{b1} - \\
& \frac{2}{3} b^{a1} c b^{b1} i \overset{2^-}{\mathcal{R}}^{\perp} a b a 1 n_{b1} + \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{1^+}{\mathcal{R}}^{\parallel} b a 1 n_a n_{b1} - \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{2^+}{\mathcal{R}}^{\parallel} b a 1 n_a n_{b1} - \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{1^+}{\mathcal{R}}^{\perp} b a 1 n_a n_{b1} - \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{2^+}{\mathcal{R}}^{\perp} b a 1 n_a n_{b1} - \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{1^+}{\mathcal{R}}^{\parallel} a a 1 n_b n_{b1} + \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{2^+}{\mathcal{R}}^{\parallel} a a 1 n_b n_{b1} + \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{1^+}{\mathcal{R}}^{\perp} a a 1 n_b n_{b1} + \\
& \frac{1}{2} b^{a1} c b^{b1} i \overset{2^+}{\mathcal{R}}^{\perp} a a 1 n_b n_{b1} + \frac{1}{2} \partial_c \mathcal{A}_{abi} + \frac{1}{2} \partial_i \mathcal{A}_{abc}
\end{aligned}$$