PSALTer results panel

Wave operator and propagator

	$1^{+}\mathcal{A}_s{}^{\perp}{}_{\alpha\beta}$	$1^{-}h^{\perp}{}_{\alpha}$	$1^{-}\mathcal{A}_s{}^{\perp t}{}_{\alpha}$	$1^{-}\mathcal{A}_s{}^{\parallel t}{}_{\alpha}$	$1^{-}\mathcal{A}_s{}^{\perp h}{}_{\alpha}$	$1^{-}\mathcal{A}_s{}^{\parallel h}{}_{\alpha}$
$1^{+}\mathcal{A}_s{}^{\perp}\dagger^{\alpha\beta}$	$\frac{a_0}{4}$	0	0	0	0	0
$1^{-}h^{\perp}\dagger^{\alpha}$	0	0	0	0	0	0
$1^{-}\mathcal{A}_s{}^{\perp t}\dagger^{\alpha}$	0	0	$\frac{1}{6}(-k^2(h_{12}+h_7)-2a_0)$	$\frac{1}{6}\sqrt{5}(k^2(h_{12}+h_8)+a_0)$	$\frac{2k^2(h_{12}+h_7)+a_0}{12\sqrt{2}}$	$\frac{1}{12}(k^2(h_{12}-2h_8)+a_0)$
$1^{-}\mathcal{A}_s{}^{\parallel t}\dagger^{\alpha}$	0	0	$\frac{1}{6}\sqrt{5}(k^2(h_{12}+h_8)+a_0)$	$\frac{1}{6}(-5k^2(h_{12}+h_7)+2a_0)$	$\frac{1}{12}\sqrt{\frac{5}{2}}(-2k^2(h_{12}+h_8)+a_0)$	$\frac{1}{12}\sqrt{5}(-k^2(h_{12}-2h_7)+a_0)$
$1^{-}\mathcal{A}_s{}^{\perp h}\dagger^{\alpha}$	0	0	$\frac{2k^2(h_{12}+h_7)+a_0}{12\sqrt{2}}$	$\frac{1}{12}\sqrt{\frac{5}{2}}(-2k^2(h_{12}+h_8)+a_0)$	$\frac{1}{12}(-k^2(h_{12}+h_7)+a_0)$	$-\frac{k^2(h_{12}-2h_8)+4a_0}{12\sqrt{2}}$
$1^{-}\mathcal{A}_s{}^{\parallel h}\dagger^{\alpha}$	0	0	$\frac{1}{12}(k^2(h_{12}-2h_8)+a_0)$	$\frac{1}{12}\sqrt{5}(-k^2(h_{12}-2h_7)+a_0)$	$-\frac{k^2(h_{12}-2h_8)+4a_0}{12\sqrt{2}}$	$\frac{1}{12}(k^2(4h_{12}-2h_7)-a_0)$

	$0^{+}\mathcal{T}^{\perp}$	$0^{+}\mathcal{T}^{\parallel}$	$0^{+}\mathcal{W}_s{}^{\perp t}$	$0^{+}\mathcal{W}_s{}^{\parallel}$	$0^{+}\mathcal{W}_s{}^{\perp h}$
$0^{+}\mathcal{T}^{\perp}\dagger$	0	0	0	0	0
$0^{+}\mathcal{T}^{\parallel}\dagger$	0	$\frac{4(2k^2(-2h_{12}+h_7+h_8)+a_0)}{k^2a_0^2}$	$-\frac{8ikh_{12}}{\sqrt{3}a_0^2}$	$-\frac{4ik(2h_{12}-h_7-h_8)}{\sqrt{3}a_0^2}$	$\frac{8i\sqrt{\frac{2}{3}}k(2h_{12}-h_7-h_8)}{a_0^2}$
$0^{+}\mathcal{W}_s{}^{\perp t}\dagger$	0	$\frac{8ikh_{12}}{\sqrt{3}a_0^2}$	$-\frac{-6k^2(2h_{12}+h_7+h_8)+a_0}{3a_0^2}$	$\frac{-4k^2h_{12}+5a_0}{3a_0^2}$	$\frac{2\sqrt{2}(4k^2h_{12}+a_0)}{3a_0^2}$
$0^{+}\mathcal{W}_s{}^{\parallel}\dagger$	0	$\frac{4ik(2h_{12}-h_7-h_8)}{\sqrt{3}a_0^2}$	$\frac{-4k^2h_{12}+5a_0}{3a_0^2}$	$-\frac{k^2(4h_{12}-2(h_7+h_8))+a_0}{3a_0^2}$	$\frac{2\sqrt{2}(k^2(4h_{12}-2(h_7+h_8))+a_0)}{3a_0^2}$
$0^{+}\mathcal{W}_s{}^{\perp h}\dagger$	0	$-\frac{8i\sqrt{\frac{2}{3}}k(2h_{12}-h_7-h_8)}{a_0^2}$	$\frac{2\sqrt{2}(4k^2h_{12}+a_0)}{3a_0^2}$	$\frac{2\sqrt{2}(k^2(4h_{12}-2(h_7+h_8))+a_0)}{3a_0^2}$	$-\frac{8(k^2(4h_{12}-2(h_7+h_8))+a_0)}{3a_0^2}$

	$1^{+}\mathcal{W}_s{}^{\perp}{}_{\alpha\beta}$	$1^{-}\mathcal{T}^{\perp}{}_{\alpha}$	$1^{-}\mathcal{W}_s{}^{\perp t}{}_{\alpha}$	$1^{-}\mathcal{W}_s{}^{\parallel t}{}_{\alpha}$	$1^{-}\mathcal{W}_s{}^{\perp h}{}_{\alpha}$	$1^{-}\mathcal{W}_s{}^{\parallel h}{}_{\alpha}$
$1^{+}\mathcal{W}_s{}^{\perp}\dagger^{\alpha\beta}$	$\frac{4}{a_0}$	0	0	0	0	0
$1^{-}\mathcal{T}^{\perp}\dagger^{\alpha}$	0	0	0	0	0	0
$1^{-}\mathcal{W}_s{}^{\perp t}\dagger^{\alpha}$	0	0	$\frac{20k^6h_{12}^2(h_7-h_8)-4k^4(h_{12}^2-h_7^2+h_8^2+4h_{12}(-h_7+h_8))a_0+8k^2(4h_{12}+h_7+2h_8)a_0^2-13a_0^3}{3a_0^3(k^2(h_7-h_8)+3a_0)}$	$\frac{\sqrt{5}(4k^4h_{12}(h_7-h_8)+2k^2(2h_{12}+h_7-h_8)a_0+5a_0^2)}{3a_0^2(k^2(h_7-h_8)+3a_0)}$	$\frac{2\sqrt{2}(10k^6h_{12}^2(h_7-h_8)-2k^4(h_{12}^2-h_7^2+h_8^2+4h_{12}(-h_7+h_8))a_0+k^2(4h_{12}+7h_7+5h_8)a_0^2+a_0^3)}{3a_0^3(k^2(h_7-h_8)+3a_0)}$	$\frac{4(5k^4h_{12}(h_7-h_8)-k^2(h_{12}-h_7+h_8)a_0+a_0^2)}{3a_0^2(k^2(h_7-h_8)+3a_0)}$
$1^{-}\mathcal{W}_s{}^{\parallel t}\dagger^{\alpha}$	0	0	$\frac{\sqrt{5}(4k^4h_{12}(h_7-h_8)+2k^2(2h_{12}+h_7-h_8)a_0+5a_0^2)}{3a_0^2(k^2(h_7-h_8)+3a_0)}$	$\frac{4}{3a_0}-\frac{5}{3k^2(h_7-h_8)+9a_0}$	$\frac{2\sqrt{10}(2k^2h_{12}+a_0)(k^2(h_7-h_8)+a_0)}{3a_0^2(k^2(h_7-h_8)+3a_0)}$	$\frac{4\sqrt{5}(k^2(h_7-h_8)+a_0)}{3a_0(k^2(h_7-h_8)+3a_0)}$
$1^{-}\mathcal{W}_s{}^{\perp h}\dagger^{\alpha}$	0	0	$\frac{2\sqrt{2}(10k^6h_{12}^2(h_7-h_8)-2k^4(h_{12}^2-h_7^2+h_8^2+4h_{12}(-h_7+h_8))a_0+k^2(4h_{12}+7h_7+5h_8)a_0^2+a_0^3)}{3a_0^3(k^2(h_7-h_8)+3a_0)}$	$\frac{2\sqrt{10}(2k^2h_{12}+a_0)(k^2(h_7-h_8)+a_0)}{3a_0^2(k^2(h_7-h_8)+3a_0)}$	$\frac{8(5k^6h_{12}^2(h_7-h_8)-k^4(h_{12}^2-h_7^2+h_8^2+4h_{12}(-h_7+h_8))a_0+k^2(-4h_{12}+5h_7+h_8)a_0^2+2a_0^3)}{3a_0^3(k^2(h_7-h_8)+3a_0)}$	$-\frac{4\sqrt{2}(5k^4h_{12}(-h_7+h_8)+k^2(h_{12}-h_7+h_8)a_0+5a_0^2)}{3a_0^2(k^2(h_7-h_8)+3a_0)}$
$1^{-}\mathcal{W}_s{}^{\parallel h}\dagger^{\alpha}$	0	0	$\frac{4(5k^4h_{12}(h_7-h_8)-k^2(h_{12}-h_7+h_8)a_0+a_0^2)}{3a_0^2(k^2(h_7-h_8)+3a_0)}$	$\frac{4\sqrt{5}(k^2(h_7-h_8)+a_0)}{3a_0(k^2(h_7-h_8)+3a_0)}$	$-\frac{4\sqrt{2}(5k^4h_{12}(-h_7+h_8)+k^2(h_{12}-h_7+h_8)a_0+5a_0^2)}{3a_0^2(k^2(h_7-h_8)+3a_0)}$	$\frac{4}{3}\left(\frac{5}{a_0}-\frac{16}{k^2(h_7-h_8)+3a_0}\right)$

$$
\begin{aligned}
S == \iiiint\Big(\tfrac{1}{8}\big(&-4a_0\mathcal{A}_{\alpha\chi\beta}\mathcal{A}^{\alpha\beta\chi}+8\mathcal{A}^{\alpha\beta\chi}\mathcal{W}_{\alpha\beta\chi}+8\mathcal{T}^{\alpha\beta}h_{\alpha\beta}+4a_0h^{\alpha\beta}\partial_{\beta}\mathcal{A}_{\alpha}{}^{\chi}{}_{\chi}-4a_0\mathcal{A}^{\alpha\beta\chi}\partial_{\beta}h_{\alpha\chi}+2a_0\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\beta}h^{\chi}{}_{\chi}+\\
&2a_0h^{\alpha\beta}\partial_{\beta}\partial_{\alpha}h^{\chi}{}_{\chi}-a_0\partial_{\beta}h^{\chi}{}_{\chi}\partial^{\beta}h^{\alpha}{}_{\alpha}-4a_0h^{\alpha\beta}\partial_{\chi}\mathcal{A}_{\alpha}{}^{\chi}{}_{\beta}-2a_0h^{\alpha}{}_{\alpha}\partial_{\chi}\mathcal{A}^{\beta}{}_{\beta}{}^{\chi}+2a_0h^{\alpha}{}_{\alpha}\partial_{\chi}\mathcal{A}^{\beta\chi}{}_{\beta}+2a_0\partial^{\beta}h^{\alpha}{}_{\alpha}\partial_{\chi}h_{\beta}{}^{\chi}+\\
&2a_0\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}(2\mathcal{A}^{\chi}{}_{\beta\chi}-\partial_{\beta}h^{\chi}{}_{\chi}+2\partial_{\chi}h_{\beta}{}^{\chi})-4h_{12}\partial_{\beta}\mathcal{A}^{\alpha\beta\chi}\partial_{\chi}\partial_{\alpha}h^{\delta}{}_{\delta}+4h_7\partial_{\beta}\mathcal{A}^{\alpha\beta\chi}\partial_{\chi}\partial_{\alpha}h^{\delta}{}_{\delta}+4h_8\partial_{\beta}\mathcal{A}^{\alpha\beta\chi}\partial_{\chi}\partial_{\alpha}h^{\delta}{}_{\delta}-\\
&4a_0h^{\alpha\beta}\partial_{\chi}\partial_{\beta}h_{\alpha}{}^{\chi}+2a_0h^{\alpha}{}_{\alpha}\partial_{\chi}\partial_{\beta}h^{\beta\chi}+4h_{12}\partial_{\alpha}\mathcal{A}^{\alpha\beta\chi}\partial_{\chi}\partial_{\beta}h^{\delta}{}_{\delta}+2a_0h^{\alpha\beta}\partial_{\chi}\partial^{\chi}h_{\alpha\beta}-2a_0h^{\alpha}{}_{\alpha}\partial_{\chi}\partial^{\chi}h^{\beta}{}_{\beta}-4h_8\partial_{\beta}\mathcal{A}_{\chi}{}^{\delta}{}_{\delta}\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}-\\
&4h_{12}\partial_{\beta}\mathcal{A}^{\delta}{}_{\chi\delta}\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}-4h_7\partial_{\chi}\mathcal{A}_{\beta}{}^{\delta}{}_{\delta}\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}-4h_{12}\partial_{\chi}\mathcal{A}^{\delta}{}_{\beta\delta}\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}+4h_{12}\partial_{\chi}\partial_{\beta}h^{\delta}{}_{\delta}\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}-4h_7\partial_{\chi}\partial_{\beta}h^{\delta}{}_{\delta}\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}-\\
&4h_8\partial_{\chi}\partial_{\beta}h^{\delta}{}_{\delta}\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}-4h_{12}\partial_{\chi}\partial_{\beta}h^{\delta}{}_{\delta}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}-2a_0\partial_{\beta}h_{\alpha\chi}\partial^{\chi}h^{\alpha\beta}+a_0\partial_{\chi}h_{\alpha\beta}\partial^{\chi}h^{\alpha\beta}+2h_{12}\partial_{\chi}\partial_{\beta}h^{\delta}{}_{\delta}\partial^{\chi}\partial^{\beta}h^{\alpha}{}_{\alpha}-h_7\partial_{\chi}\partial_{\beta}h^{\delta}{}_{\delta}\partial^{\chi}\partial^{\beta}h^{\alpha}{}_{\alpha}-\\
&h_8\partial_{\chi}\partial_{\beta}h^{\delta}{}_{\delta}\partial^{\chi}\partial^{\beta}h^{\alpha}{}_{\alpha}-4h_7\partial_{\beta}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\mathcal{A}_{\alpha}{}^{\delta}{}_{\chi}-4h_8\partial_{\beta}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\mathcal{A}_{\alpha}{}^{\delta}{}_{\chi}+4h_{12}\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\partial_{\delta}\mathcal{A}_{\beta\chi}{}^{\delta}-8h_{12}\partial_{\alpha}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\mathcal{A}_{\beta}{}^{\delta}{}_{\chi}+\\
&8h_7\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\partial_{\delta}\mathcal{A}_{\beta}{}^{\delta}{}_{\chi}+8h_8\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\partial_{\delta}\mathcal{A}_{\beta}{}^{\delta}{}_{\chi}+8h_{12}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\delta}\mathcal{A}_{\beta}{}^{\delta}{}_{\chi}+4h_{12}\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\partial_{\delta}\mathcal{A}_{\chi}{}^{\delta}{}_{\beta}-4h_{12}\partial_{\chi}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial_{\beta}h_{\alpha}{}^{\delta}+\\
&2h_7\partial_{\chi}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial_{\beta}h_{\alpha}{}^{\delta}+2h_8\partial_{\chi}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial_{\beta}h_{\alpha}{}^{\delta}-4h_{12}\partial_{\alpha}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\partial_{\beta}h_{\chi}{}^{\delta}-2h_7\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial_{\beta}h_{\chi}{}^{\delta}-2h_8\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial_{\beta}h_{\chi}{}^{\delta}-\\
&4h_{12}\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\partial_{\delta}\partial_{\beta}h_{\chi}{}^{\delta}+4h_7\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\partial_{\delta}\partial_{\beta}h_{\chi}{}^{\delta}+4h_8\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\partial_{\delta}\partial_{\beta}h_{\chi}{}^{\delta}+4h_{12}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\delta}\partial_{\beta}h_{\chi}{}^{\delta}+4h_{12}\partial^{\chi}\partial_{\alpha}h^{\alpha\beta}\partial_{\delta}\partial_{\beta}h_{\chi}{}^{\delta}-\\
&4h_{12}\partial^{\chi}\partial^{\beta}h^{\alpha}{}_{\alpha}\partial_{\delta}\partial_{\beta}h_{\chi}{}^{\delta}+2h_7\partial^{\chi}\partial^{\beta}h^{\alpha}{}_{\alpha}\partial_{\delta}\partial_{\beta}h_{\chi}{}^{\delta}+2h_8\partial^{\chi}\partial^{\beta}h^{\alpha}{}_{\alpha}\partial_{\delta}\partial_{\beta}h_{\chi}{}^{\delta}+8h_{12}\partial_{\beta}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\partial_{\chi}h_{\alpha}{}^{\delta}-8h_7\partial_{\beta}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\partial_{\chi}h_{\alpha}{}^{\delta}-\\
&8h_8\partial_{\beta}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\partial_{\chi}h_{\alpha}{}^{\delta}-4h_{12}\partial_{\alpha}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\partial_{\chi}h_{\beta}{}^{\delta}-2h_7\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial_{\chi}h_{\beta}{}^{\delta}-2h_8\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial_{\chi}h_{\beta}{}^{\delta}-4h_{12}\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\partial_{\delta}\partial_{\chi}h_{\beta}{}^{\delta}+\\
&4h_7\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\partial_{\delta}\partial_{\chi}h_{\beta}{}^{\delta}+4h_8\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\partial_{\delta}\partial_{\chi}h_{\beta}{}^{\delta}+4h_{12}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\delta}\partial_{\chi}h_{\beta}{}^{\delta}+4h_{12}\partial^{\chi}\partial_{\alpha}h^{\alpha\beta}\partial_{\delta}\partial_{\chi}h_{\beta}{}^{\delta}-4h_{12}\partial^{\chi}\partial^{\beta}h^{\alpha}{}_{\alpha}\partial_{\delta}\partial_{\chi}h_{\beta}{}^{\delta}+\\
&2h_7\partial^{\chi}\partial^{\beta}h^{\alpha}{}_{\alpha}\partial_{\delta}\partial_{\chi}h_{\beta}{}^{\delta}+2h_8\partial^{\chi}\partial^{\beta}h^{\alpha}{}_{\alpha}\partial_{\delta}\partial_{\chi}h_{\beta}{}^{\delta}+2h_{12}\partial_{\chi}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\alpha\beta}-h_7\partial_{\chi}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\alpha\beta}-h_8\partial_{\chi}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\alpha\beta}-\\
&4h_{12}\partial_{\beta}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\partial^{\delta}h_{\alpha\chi}+4h_7\partial_{\beta}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\partial^{\delta}h_{\alpha\chi}+4h_8\partial_{\beta}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\partial^{\delta}h_{\alpha\chi}+4h_{12}\partial_{\alpha}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\partial^{\delta}h_{\beta\chi}+2h_7\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi}+\\
&2h_8\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi}+4h_{12}\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi}-4h_7\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi}-4h_8\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi}-4h_{12}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\delta}\partial^{\delta}h_{\beta\chi}-\\
&4h_{12}\partial^{\chi}\partial_{\alpha}h^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi}+4h_{12}\partial^{\chi}\partial^{\beta}h^{\alpha}{}_{\alpha}\partial_{\delta}\partial^{\delta}h_{\beta\chi}-2h_7\partial^{\chi}\partial^{\beta}h^{\alpha}{}_{\alpha}\partial_{\delta}\partial^{\delta}h_{\beta\chi}-2h_8\partial^{\chi}\partial^{\beta}h^{\alpha}{}_{\alpha}\partial_{\delta}\partial^{\delta}h_{\beta\chi}\big)\Big)[t,x,y,z]\,dz\,dy\,dx\,dt
\end{aligned}
$$

	$2^{+}h^{\parallel}{}_{\alpha\beta}$	$2^{+}\mathcal{A}_s{}^{\parallel}{}_{\alpha\beta}$	$2^{+}\mathcal{A}_s{}^{\perp}{}_{\alpha\beta}$	$2^{-}\mathcal{A}_s{}^{\parallel}{}_{\alpha\beta\chi}$
$2^{+}h^{\parallel}\dagger^{\alpha\beta}$	$\frac{1}{8}(k^4(2h_{12}-h_7-h_8)-k^2a_0)$	$-\frac{ik^3(h_7+h_8)}{4\sqrt{3}}$	$\frac{ik^3(3h_{12}-2(h_7+h_8))}{4\sqrt{6}}$	0
$2^{+}\mathcal{A}_s{}^{\parallel}\dagger^{\alpha\beta}$	$\frac{ik^3(h_7+h_8)}{4\sqrt{3}}$	$\frac{1}{6}(-k^2(2h_{12}+h_7+h_8)-3a_0)$	$-\frac{k^2(h_{12}+2(h_7+h_8))}{6\sqrt{2}}$	0
$2^{+}\mathcal{A}_s{}^{\perp}\dagger^{\alpha\beta}$	$-\frac{ik^3(3h_{12}-2(h_7+h_8))}{4\sqrt{6}}$	$-\frac{k^2(h_{12}+2(h_7+h_8))}{6\sqrt{2}}$	$\frac{1}{3}k^2(h_{12}-h_7-h_8)+\frac{a_0}{4}$	0
$2^{-}\mathcal{A}_s{}^{\parallel}\dagger^{\alpha\beta\chi}$	0	0	0	$\frac{a_0}{4}$

	$2^{+}\mathcal{T}^{\parallel}{}_{\alpha\beta}$	$2^{+}\mathcal{W}_s{}^{\parallel}{}_{\alpha\beta}$	$2^{+}\mathcal{W}_s{}^{\perp}{}_{\alpha\beta}$	$2^{-}\mathcal{W}_s{}^{\parallel}{}_{\alpha\beta\chi}$
$2^{+}\mathcal{T}^{\parallel}\dagger^{\alpha\beta}$	$\frac{8(-k^4h_{12}^2+k^2(-2h_{12}+h_7+h_8)a_0-a_0^2)}{k^2a_0^3}$	$-\frac{4ik(k^2h_{12}^2-(h_7+h_8)a_0)}{\sqrt{3}a_0^3}$	$\frac{4i\sqrt{\frac{2}{3}}k(2k^2h_{12}^2+3h_{12}a_0-2(h_7+h_8)a_0)}{a_0^3}$	0
$2^{+}\mathcal{W}_s{}^{\parallel}\dagger^{\alpha\beta}$	$\frac{4i(k^3h_{12}^2-k(h_7+h_8)a_0)}{\sqrt{3}a_0^3}$	$\frac{-2k^4h_{12}^2+2k^2(2h_{12}+h_7+h_8)a_0-6a_0^2}{3a_0^3}$	$\frac{2\sqrt{2}k^2(2k^2h_{12}^2-(h_{12}+2(h_7+h_8))a_0)}{3a_0^3}$	0
$2^{+}\mathcal{W}_s{}^{\perp}\dagger^{\alpha\beta}$	$-\frac{4i\sqrt{\frac{2}{3}}k(2k^2h_{12}^2+3h_{12}a_0-2(h_7+h_8)a_0)}{a_0^3}$	$\frac{2\sqrt{2}k^2(2k^2h_{12}^2-(h_{12}+2(h_7+h_8))a_0)}{3a_0^3}$	$\frac{4(-4k^4h_{12}^2+4k^2(-h_{12}+h_7+h_8)a_0+3a_0^2)}{3a_0^3}$	0
$2^{-}\mathcal{W}_s{}^{\parallel}\dagger^{\alpha\beta\chi}$	0	0	0	$\frac{4}{a_0}$

	$0^{+}h^{\perp}$	$0^{+}h^{\parallel}$	$0^{+}\mathcal{A}_s{}^{\perp t}$	$0^{+}\mathcal{A}_s{}^{\parallel}$	$0^{+}\mathcal{A}_s{}^{\perp h}$
$0^{+}h^{\perp}\dagger$	0	0	0	0	0
$0^{+}h^{\parallel}\dagger$	0	$\frac{1}{4}k^2(k^2(4h_{12}-2(h_7+h_8))+a_0)$	0	$\frac{ik^3(h_7+h_8)}{2\sqrt{3}}$	$\frac{ik^3(12h_{12}-5(h_7+h_8))}{4\sqrt{6}}$
$0^{+}\mathcal{A}_s{}^{\perp t}\dagger$	0	0	0	$\frac{a_0}{2}$	$\frac{a_0}{4\sqrt{2}}$
$0^{+}\mathcal{A}_s{}^{\parallel}\dagger$	0	$-\frac{ik^3(h_7+h_8)}{2\sqrt{3}}$	$\frac{a_0}{2}$	$-\frac{2}{3}k^2(2h_{12}+h_7+h_8)$	$\frac{2k^2(-4h_{12}+h_7+h_8)+3a_0}{12\sqrt{2}}$
$0^{+}\mathcal{A}_s{}^{\perp h}\dagger$	0	$-\frac{ik^3(12h_{12}-5(h_7+h_8))}{4\sqrt{6}}$	$\frac{a_0}{4\sqrt{2}}$	$\frac{2k^2(-4h_{12}+h_7+h_8)+3a_0}{12\sqrt{2}}$	$\frac{1}{12}(k^2(16h_{12}-7(h_7+h_8))-3a_0)$

	$3^{-}\mathcal{W}_s{}^{\parallel}{}_{\alpha\beta\chi}$
$3^{-}\mathcal{W}_s{}^{\parallel}\dagger^{\alpha\beta\chi}$	$-\frac{2}{a_0}$

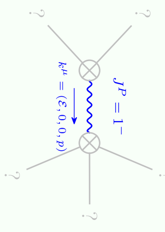
	$3^{-}\mathcal{A}_s{}^{\parallel}{}_{\alpha\beta\chi}$
$3^{-}\mathcal{A}_s{}^{\parallel}\dagger^{\alpha\beta\chi}$	$-\frac{a_0}{2}$

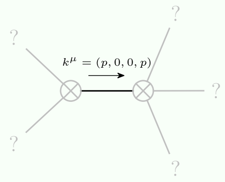
Spin-parity form	Covariant form	Multiplicities
$0^{+}\mathcal{T}^{\perp} == 0$	$\partial_{\beta}\partial_{\alpha}\mathcal{T}^{\alpha\beta} == 0$	1
$1^{-}\mathcal{T}^{\perp\alpha} == 0$	$\partial_{\chi}\partial_{\beta}\partial^{\alpha}\mathcal{T}^{\beta\chi} == \partial_{\chi}\partial^{\chi}\partial_{\beta}\mathcal{T}^{\alpha\beta}$	3
Total expected gauge generators:		4

Massive and massless spectra

Massive particle

Pole residue:	$\frac{576h_{12}^2-144h_{12}(h_7-h_8)+34(h_7-h_8)^2}{(h_7-h_8)^3}>0$
Square mass:	$-\frac{3a_0}{h_7-h_8}>0$
Spin:	1
Parity:	Odd





Massless particle

Pole residue:	$-\frac{1}{a_0}>0$
Polarisations:	2

Unitarity conditions

$(h_7 \mid h_{12}) \in \mathbb{R}$ && $a_0 < 0$ && $h_8 < h_7$