PSALTer results panel

$$
\begin{aligned}
&\mathcal{S} == \\
&\iiiint\Big(\tfrac{1}{6}\Big(-3\alpha_{0}\mathcal{A}^{\alpha\beta}{}_{\alpha}\mathcal{A}_{\beta}{}^{\chi}{}_{\chi}+4\beta_{1}\mathcal{A}^{\alpha\beta}{}_{\alpha}\mathcal{A}_{\beta}{}^{\chi}{}_{\chi}-4\beta_{2}\mathcal{A}^{\alpha\beta}{}_{\alpha}\mathcal{A}_{\beta}{}^{\chi}{}_{\chi}+6\mathcal{A}^{\alpha\beta\chi}\sigma_{\alpha\beta\chi}+6f^{\alpha\beta}\tau(\Delta+\mathcal{K})_{\alpha\beta}-6\alpha_{0}f^{\alpha\beta}\partial_{\beta}\mathcal{A}_{\alpha}{}^{\chi}{}_{\chi}+6\alpha_{0}\partial_{\beta}\mathcal{A}^{\alpha\beta}{}_{\alpha}-8\beta_{1}\mathcal{A}_{\alpha}{}^{\chi}{}_{\chi}\partial_{\beta}f^{\alpha\beta}+8\beta_{2}\mathcal{A}_{\alpha}{}^{\chi}{}_{\chi}\partial_{\beta}f^{\alpha\beta}+8\beta_{1}\mathcal{A}_{\beta}{}^{\chi}{}_{\chi}\partial^{\beta}f^{\alpha}{}_{\alpha}-8\beta_{2}\mathcal{A}_{\beta}{}^{\chi}{}_{\chi}\partial^{\beta}f^{\alpha}{}_{\alpha}-4\beta_{1}\partial_{\beta}f^{\chi}{}_{\chi}\partial^{\beta}f^{\alpha}{}_{\alpha}+4\beta_{2}\partial_{\beta}f^{\chi}{}_{\chi}\partial^{\beta}f^{\alpha}{}_{\alpha}+6\alpha_{0}f^{\alpha\beta}\partial_{\chi}\mathcal{A}_{\alpha}{}^{\chi}{}_{\beta}-6\alpha_{0}f^{\alpha}{}_{\alpha}\partial_{\chi}\mathcal{A}^{\beta\chi}{}_{\beta}-4\beta_{1}\partial_{\beta}f^{\alpha\beta}\partial_{\chi}f_{\alpha}{}^{\chi}+4\beta_{2}\partial_{\beta}f^{\alpha\beta}\partial_{\chi}f_{\alpha}{}^{\chi}+8\beta_{1}\partial^{\beta}f^{\alpha}{}_{\alpha}\partial_{\chi}f_{\beta}{}^{\chi}-8\beta_{2}\partial^{\beta}f^{\alpha}{}_{\alpha}\partial_{\chi}f_{\beta}{}^{\chi}+6\alpha_{1}\partial_{\beta}\mathcal{A}_{\chi}{}^{\delta}{}_{\delta}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}-6\alpha_{2}\partial_{\beta}\mathcal{A}_{\chi}{}^{\delta}{}_{\delta}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}-6\alpha_{4}\partial_{\beta}\mathcal{A}_{\chi}{}^{\delta}{}_{\delta}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}+ \\
&\quad 6\alpha_{5}\partial_{\beta}\mathcal{A}_{\chi}{}^{\delta}{}_{\delta}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}+6\alpha_{1}\partial_{\chi}\mathcal{A}_{\beta}{}^{\delta}{}_{\delta}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}+6\alpha_{2}\partial_{\chi}\mathcal{A}_{\beta}{}^{\delta}{}_{\delta}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}-6\alpha_{4}\partial_{\chi}\mathcal{A}_{\beta}{}^{\delta}{}_{\delta}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}-6\alpha_{5}\partial_{\chi}\mathcal{A}_{\beta}{}^{\delta}{}_{\delta}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}+8\beta_{1}\mathcal{A}_{\beta\chi\alpha}\partial^{\chi}f^{\alpha\beta}+16\beta_{3}\mathcal{A}_{\beta\chi\alpha}\partial^{\chi}f^{\alpha\beta}-8\beta_{1}\partial_{\alpha}f_{\beta\chi}\partial^{\chi}f^{\alpha\beta}+8\beta_{3}\partial_{\alpha}f_{\beta\chi}\partial^{\chi}f^{\alpha\beta}-8\beta_{1}\partial_{\alpha}f_{\chi\beta}\partial^{\chi}f^{\alpha\beta}-4\beta_{3}\partial_{\alpha}f_{\chi\beta}\partial^{\chi}f^{\alpha\beta}+4\beta_{1}\partial_{\beta}f_{\alpha\chi}\partial^{\chi}f^{\alpha\beta}-4\beta_{3}\partial_{\beta}f_{\alpha\chi}\partial^{\chi}f^{\alpha\beta}+8\beta_{1}\partial_{\chi}f_{\alpha\beta}\partial^{\chi}f^{\alpha\beta}+4\beta_{3}\partial_{\chi}f_{\alpha\beta}\partial^{\chi}f^{\alpha\beta}+ \\
&\quad 4\beta_{1}\partial_{\chi}f_{\beta\alpha}\partial^{\chi}f^{\alpha\beta}-4\beta_{3}\partial_{\chi}f_{\beta\alpha}\partial^{\chi}f^{\alpha\beta}+4\left(\beta_{1}+2\beta_{3}\right)\mathcal{A}_{\alpha\beta\chi}\left(\mathcal{A}^{\alpha\beta\chi}+2\partial^{\chi}f^{\alpha\beta}\right)+\mathcal{A}_{\alpha\chi\beta}\left(\left(-3\alpha_{0}+4\beta_{1}-16\beta_{3}\right)\mathcal{A}^{\alpha\beta\chi}+16\left(\beta_{1}-\beta_{3}\right)\partial^{\chi}f^{\alpha\beta}\right)+6\alpha_{1}\partial_{\alpha}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\mathcal{A}_{\beta}{}^{\delta}{}_{\chi}+6\alpha_{2}\partial_{\alpha}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\mathcal{A}_{\beta}{}^{\delta}{}_{\chi}-6\alpha_{4}\partial_{\alpha}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\mathcal{A}_{\beta}{}^{\delta}{}_{\chi}-6\alpha_{5}\partial_{\alpha}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\mathcal{A}_{\beta}{}^{\delta}{}_{\chi}-12\alpha_{1}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\delta}\mathcal{A}_{\beta}{}^{\delta}{}_{\chi}-12\alpha_{2}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\delta}\mathcal{A}_{\beta}{}^{\delta}{}_{\chi}+12\alpha_{4}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\delta}\mathcal{A}_{\beta}{}^{\delta}{}_{\chi}+12\alpha_{5}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\delta}\mathcal{A}_{\beta}{}^{\delta}{}_{\chi}+ \\
&\quad 6\alpha_{1}\partial_{\alpha}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\mathcal{A}_{\chi}{}^{\delta}{}_{\beta}-6\alpha_{2}\partial_{\alpha}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\mathcal{A}_{\chi}{}^{\delta}{}_{\beta}-6\alpha_{4}\partial_{\alpha}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\mathcal{A}_{\chi}{}^{\delta}{}_{\beta}+6\alpha_{5}\partial_{\alpha}\mathcal{A}^{\alpha\beta\chi}\partial_{\delta}\mathcal{A}_{\chi}{}^{\delta}{}_{\beta}-12\alpha_{1}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\delta}\mathcal{A}_{\chi}{}^{\delta}{}_{\beta}+12\alpha_{2}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\delta}\mathcal{A}_{\chi}{}^{\delta}{}_{\beta}+12\alpha_{4}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\delta}\mathcal{A}_{\chi}{}^{\delta}{}_{\beta}-12\alpha_{5}\partial^{\chi}\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\delta}\mathcal{A}_{\chi}{}^{\delta}{}_{\beta}+8\alpha_{1}\partial_{\beta}\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\delta}\mathcal{A}^{\chi\delta}{}_{\chi}-12\alpha_{4}\partial_{\beta}\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\delta}\mathcal{A}^{\chi\delta}{}_{\chi}+4\alpha_{6}\partial_{\beta}\mathcal{A}^{\alpha\beta}{}_{\alpha}\partial_{\delta}\mathcal{A}^{\chi\delta}{}_{\chi}-8\alpha_{1}\partial_{\beta}\mathcal{A}_{\alpha\chi\delta}\partial^{\delta}\mathcal{A}^{\alpha\beta\chi}+8\alpha_{3}\partial_{\beta}\mathcal{A}_{\alpha\chi\delta}\partial^{\delta}\mathcal{A}^{\alpha\beta\chi}+ \\
&\quad 4\alpha_{1}\partial_{\beta}\mathcal{A}_{\alpha\delta\chi}\partial^{\delta}\mathcal{A}^{\alpha\beta\chi}-4\alpha_{3}\partial_{\beta}\mathcal{A}_{\alpha\delta\chi}\partial^{\delta}\mathcal{A}^{\alpha\beta\chi}+8\alpha_{1}\partial_{\beta}\mathcal{A}_{\chi\delta\alpha}\partial^{\delta}\mathcal{A}^{\alpha\beta\chi}-12\alpha_{2}\partial_{\beta}\mathcal{A}_{\chi\delta\alpha}\partial^{\delta}\mathcal{A}^{\alpha\beta\chi}+4\alpha_{3}\partial_{\beta}\mathcal{A}_{\chi\delta\alpha}\partial^{\delta}\mathcal{A}^{\alpha\beta\chi}-4\alpha_{1}\partial_{\chi}\mathcal{A}_{\alpha\beta\delta}\partial^{\delta}\mathcal{A}^{\alpha\beta\chi}-6\alpha_{2}\partial_{\chi}\mathcal{A}_{\alpha\beta\delta}\partial^{\delta}\mathcal{A}^{\alpha\beta\chi}-2\alpha_{3}\partial_{\chi}\mathcal{A}_{\alpha\beta\delta}\partial^{\delta}\mathcal{A}^{\alpha\beta\chi}+4\alpha_{1}\partial_{\delta}\mathcal{A}_{\alpha\beta\chi}\partial^{\delta}\mathcal{A}^{\alpha\beta\chi}+6\alpha_{2}\partial_{\delta}\mathcal{A}_{\alpha\beta\chi}\partial^{\delta}\mathcal{A}^{\alpha\beta\chi}+2\alpha_{3}\partial_{\delta}\mathcal{A}_{\alpha\beta\chi}\partial^{\delta}\mathcal{A}^{\alpha\beta\chi}+4\alpha_{1}\partial_{\delta}\mathcal{A}_{\alpha\chi\beta}\partial^{\delta}\mathcal{A}^{\alpha\beta\chi}-4\alpha_{3}\partial_{\delta}\mathcal{A}_{\alpha\chi\beta}\partial^{\delta}\mathcal{A}^{\alpha\beta\chi}\Big)\Big)[t,x,y,z]\,dz\,dy\,dx\,dt
\end{aligned}
$$

Wave operator

	${}^{0^+}\mathcal{A}^{\parallel}$	${}^{0^+}f^{\parallel}$	${}^{0^+}f^{\perp}$	${}^{0^-}\mathcal{A}^{\parallel}$
${}^{0^+}\mathcal{A}^{\parallel}\dagger$	$\frac{\alpha_{0}}{2}+\beta_{2}+\left(\alpha_{4}+\alpha_{6}\right)k^{2}$	$-\frac{i\left(\alpha_{0}+2\beta_{2}\right)k}{\sqrt{2}}$	0	0
${}^{0^+}f^{\parallel}\dagger$	$\frac{i\left(\alpha_{0}+2\beta_{2}\right)k}{\sqrt{2}}$	$2\beta_{2}k^{2}$	0	0
${}^{0^+}f^{\perp}\dagger$	0	0	0	0
${}^{0^-}\mathcal{A}^{\parallel}\dagger$	0	0	0	$\frac{\alpha_{0}}{2}+4\beta_{3}+\left(\alpha_{2}+\alpha_{3}\right)k^{2}$

	${}^{1^+}\mathcal{A}^{\parallel}{}_{\alpha\beta}$	${}^{1^+}\mathcal{A}^{\perp}{}_{\alpha\beta}$	${}^{1^+}f^{\parallel}{}_{\alpha\beta}$	${}^{1^-}\mathcal{A}^{\parallel}{}_{\alpha}$	${}^{1^-}\mathcal{A}^{\perp}{}_{\alpha}$	${}^{1^-}f^{\parallel}{}_{\alpha}$	${}^{1^-}f^{\perp}{}_{\alpha}$
${}^{1^+}\mathcal{A}^{\parallel}\dagger^{\alpha\beta}$	$\frac{\alpha_{0}}{4}+\frac{1}{3}\left(\beta_{1}+8\beta_{3}\right)+\left(\alpha_{2}+\alpha_{5}\right)k^{2}$	$\frac{3\alpha_{0}-4\beta_{1}+16\beta_{3}}{6\sqrt{2}}$	$\frac{i\left(3\alpha_{0}-4\beta_{1}+16\beta_{3}\right)k}{6\sqrt{2}}$	0	0	0	0
${}^{1^+}\mathcal{A}^{\perp}\dagger^{\alpha\beta}$	$\frac{3\alpha_{0}-4\beta_{1}+16\beta_{3}}{6\sqrt{2}}$	$\frac{2}{3}\left(\beta_{1}+2\beta_{3}\right)$	$\frac{2}{3}i\left(\beta_{1}+2\beta_{3}\right)k$	0	0	0	0
${}^{1^+}f^{\parallel}\dagger^{\alpha\beta}$	$-\frac{i\left(3\alpha_{0}-4\beta_{1}+16\beta_{3}\right)k}{6\sqrt{2}}$	$-\frac{2}{3}i\left(\beta_{1}+2\beta_{3}\right)k$	$\frac{2}{3}\left(\beta_{1}+2\beta_{3}\right)k^{2}$	0	0	0	0
${}^{1^-}\mathcal{A}^{\parallel}\dagger^{\alpha}$	0	0	0	$\frac{\alpha_{0}}{4}+\frac{1}{3}\left(\beta_{1}+2\beta_{2}\right)+\left(\alpha_{4}+\alpha_{5}\right)k^{2}$	$-\frac{3\alpha_{0}-4\beta_{1}+4\beta_{2}}{6\sqrt{2}}$	0	$-\frac{1}{6}i\left(3\alpha_{0}-4\beta_{1}+4\beta_{2}\right)k$
${}^{1^-}\mathcal{A}^{\perp}\dagger^{\alpha}$	0	0	0	$-\frac{3\alpha_{0}-4\beta_{1}+4\beta_{2}}{6\sqrt{2}}$	$\frac{1}{3}\left(2\beta_{1}+\beta_{2}\right)$	0	$\frac{1}{3}i\sqrt{2}\left(2\beta_{1}+\beta_{2}\right)k$
${}^{1^-}f^{\parallel}\dagger^{\alpha}$	0	0	0	0	0	0	0
${}^{1^-}f^{\perp}\dagger^{\alpha}$	0	0	0	$\frac{1}{6}i\left(3\alpha_{0}-4\beta_{1}+4\beta_{2}\right)k$	$-\frac{1}{3}i\sqrt{2}\left(2\beta_{1}+\beta_{2}\right)k$	0	$\frac{2}{3}\left(2\beta_{1}+\beta_{2}\right)k^{2}$

	${}^{2^+}\mathcal{A}^{\parallel}{}_{\alpha\beta}$	${}^{2^+}f^{\parallel}{}_{\alpha\beta}$	${}^{2^-}\mathcal{A}^{\parallel}{}_{\alpha\beta\chi}$
${}^{2^+}\mathcal{A}^{\parallel}\dagger^{\alpha\beta}$	$-\frac{\alpha_{0}}{4}+\beta_{1}+\left(\alpha_{1}+\alpha_{4}\right)k^{2}$	$\frac{i\left(\alpha_{0}-4\beta_{1}\right)k}{2\sqrt{2}}$	0
${}^{2^+}f^{\parallel}\dagger^{\alpha\beta}$	$-\frac{i\left(\alpha_{0}-4\beta_{1}\right)k}{2\sqrt{2}}$	$2\beta_{1}k^{2}$	0
${}^{2^-}\mathcal{A}^{\parallel}\dagger^{\alpha\beta\chi}$	0	0	$-\frac{\alpha_{0}}{4}+\beta_{1}+\left(\alpha_{1}+\alpha_{2}\right)k^{2}$

Saturated propagator

	${}^{0^+}\sigma^{\parallel}$	${}^{0^+}\tau^{\parallel}$	${}^{0^+}\tau^{\perp}$	${}^{0^-}\sigma^{\parallel}$
${}^{0^+}\sigma^{\parallel}\dagger$	$-\frac{4\beta_{2}}{\alpha_{0}^{2}+2\alpha_{0}\beta_{2}-4\left(\alpha_{4}+\alpha_{6}\right)\beta_{2}k^{2}}$	$\frac{i\sqrt{2}\left(\alpha_{0}+2\beta_{2}\right)}{-\alpha_{0}\left(\alpha_{0}+2\beta_{2}\right)k+4\left(\alpha_{4}+\alpha_{6}\right)\beta_{2}k^{3}}$	0	0
${}^{0^+}\tau^{\parallel}\dagger$	$\frac{i\sqrt{2}\left(\alpha_{0}+2\beta_{2}\right)}{\alpha_{0}\left(\alpha_{0}+2\beta_{2}\right)k-4\left(\alpha_{4}+\alpha_{6}\right)\beta_{2}k^{3}}$	$\frac{\alpha_{0}+2\left(\beta_{2}+\left(\alpha_{4}+\alpha_{6}\right)k^{2}\right)}{-\alpha_{0}\left(\alpha_{0}+2\beta_{2}\right)k^{2}+4\left(\alpha_{4}+\alpha_{6}\right)\beta_{2}k^{4}}$	0	0
${}^{0^+}\tau^{\perp}\dagger$	0	0	0	0
${}^{0^-}\sigma^{\parallel}\dagger$	0	0	0	$\frac{2}{\alpha_{0}+8\beta_{3}+2\left(\alpha_{2}+\alpha_{3}\right)k^{2}}$

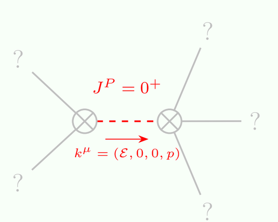
	${}^{1^+}\sigma^{\parallel}{}_{\alpha\beta}$	${}^{1^+}\sigma^{\perp}{}_{\alpha\beta}$	${}^{1^+}\tau^{\parallel}{}_{\alpha\beta}$	${}^{1^-}\sigma^{\parallel}{}_{\alpha}$	${}^{1^-}\sigma^{\perp}{}_{\alpha}$	${}^{1^-}\tau^{\parallel}{}_{\alpha}$	${}^{1^-}\tau^{\perp}{}_{\alpha}$
${}^{1^+}\sigma^{\parallel}\dagger^{\alpha\beta}$	$\frac{1}{-\frac{3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+8\beta_{3}\right)}{16\left(\beta_{1}+2\beta_{3}\right)}+\left(\alpha_{2}+\alpha_{5}\right)k^{2}}$	$-\frac{2\sqrt{2}\left(3\alpha_{0}-4\beta_{1}+16\beta_{3}\right)}{\left(1+k^{2}\right)\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+8\beta_{3}\right)+16\left(\alpha_{2}+\alpha_{5}\right)\left(\beta_{1}+2\beta_{3}\right)k^{2}\right)}$	$-\frac{2i\sqrt{2}\left(3\alpha_{0}-4\beta_{1}+16\beta_{3}\right)k}{\left(1+k^{2}\right)\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+8\beta_{3}\right)+16\left(\alpha_{2}+\alpha_{5}\right)\left(\beta_{1}+2\beta_{3}\right)k^{2}\right)}$	0	0	0	0
${}^{1^+}\sigma^{\perp}\dagger^{\alpha\beta}$	$-\frac{2\sqrt{2}\left(3\alpha_{0}-4\beta_{1}+16\beta_{3}\right)}{\left(1+k^{2}\right)\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+8\beta_{3}\right)+16\left(\alpha_{2}+\alpha_{5}\right)\left(\beta_{1}+2\beta_{3}\right)k^{2}\right)}$	$\frac{6\alpha_{0}+8\left(\beta_{1}+8\beta_{3}+3\left(\alpha_{2}+\alpha_{5}\right)k^{2}\right)}{\left(1+k^{2}\right)^{2}\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+8\beta_{3}\right)+16\left(\alpha_{2}+\alpha_{5}\right)\left(\beta_{1}+2\beta_{3}\right)k^{2}\right)}$	$\frac{6i\alpha_{0}k+8ik\left(\beta_{1}+8\beta_{3}+3\left(\alpha_{2}+\alpha_{5}\right)k^{2}\right)}{\left(1+k^{2}\right)^{2}\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+8\beta_{3}\right)+16\left(\alpha_{2}+\alpha_{5}\right)\left(\beta_{1}+2\beta_{3}\right)k^{2}\right)}$	0	0	0	0
${}^{1^+}\tau^{\parallel}\dagger^{\alpha\beta}$	$\frac{2i\sqrt{2}\left(3\alpha_{0}-4\beta_{1}+16\beta_{3}\right)k}{\left(1+k^{2}\right)\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+8\beta_{3}\right)+16\left(\alpha_{2}+\alpha_{5}\right)\left(\beta_{1}+2\beta_{3}\right)k^{2}\right)}$	$\frac{-6i\alpha_{0}k-8ik\left(\beta_{1}+8\beta_{3}+3\left(\alpha_{2}+\alpha_{5}\right)k^{2}\right)}{\left(1+k^{2}\right)^{2}\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+8\beta_{3}\right)+16\left(\alpha_{2}+\alpha_{5}\right)\left(\beta_{1}+2\beta_{3}\right)k^{2}\right)}$	$\frac{2k^{2}\left(3\alpha_{0}+4\left(\beta_{1}+8\beta_{3}+3\left(\alpha_{2}+\alpha_{5}\right)k^{2}\right)\right)}{\left(1+k^{2}\right)^{2}\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+8\beta_{3}\right)+16\left(\alpha_{2}+\alpha_{5}\right)\left(\beta_{1}+2\beta_{3}\right)k^{2}\right)}$	0	0	0	0
${}^{1^-}\sigma^{\parallel}\dagger^{\alpha}$	0	0	0	$\frac{1}{-\frac{3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+2\beta_{2}\right)}{8\left(2\beta_{1}+\beta_{2}\right)}+\left(\alpha_{4}+\alpha_{5}\right)k^{2}}$	$\frac{2\sqrt{2}\left(3\alpha_{0}-4\beta_{1}+4\beta_{2}\right)}{\left(1+2k^{2}\right)\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+2\beta_{2}\right)+8\left(\alpha_{4}+\alpha_{5}\right)\left(2\beta_{1}+\beta_{2}\right)k^{2}\right)}$	0	$\frac{4i\left(3\alpha_{0}-4\beta_{1}+4\beta_{2}\right)k}{\left(1+2k^{2}\right)\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+2\beta_{2}\right)+8\left(\alpha_{4}+\alpha_{5}\right)\left(2\beta_{1}+\beta_{2}\right)k^{2}\right)}$
${}^{1^-}\sigma^{\perp}\dagger^{\alpha}$	0	0	0	$\frac{2\sqrt{2}\left(3\alpha_{0}-4\beta_{1}+4\beta_{2}\right)}{\left(1+2k^{2}\right)\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+2\beta_{2}\right)+8\left(\alpha_{4}+\alpha_{5}\right)\left(2\beta_{1}+\beta_{2}\right)k^{2}\right)}$	$\frac{6\alpha_{0}+8\left(\beta_{1}+2\beta_{2}+3\left(\alpha_{4}+\alpha_{5}\right)k^{2}\right)}{\left(1+2k^{2}\right)^{2}\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+2\beta_{2}\right)+8\left(\alpha_{4}+\alpha_{5}\right)\left(2\beta_{1}+\beta_{2}\right)k^{2}\right)}$	0	$\frac{2i\sqrt{2}k\left(3\alpha_{0}+4\left(\beta_{1}+2\beta_{2}+3\left(\alpha_{4}+\alpha_{5}\right)k^{2}\right)\right)}{\left(1+2k^{2}\right)^{2}\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+2\beta_{2}\right)+8\left(\alpha_{4}+\alpha_{5}\right)\left(2\beta_{1}+\beta_{2}\right)k^{2}\right)}$
${}^{1^-}\tau^{\parallel}\dagger^{\alpha}$	0	0	0	0	0	0	0
${}^{1^-}\tau^{\perp}\dagger^{\alpha}$	0	0	0	$-\frac{4i\left(3\alpha_{0}-4\beta_{1}+4\beta_{2}\right)k}{\left(1+2k^{2}\right)\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+2\beta_{2}\right)+8\left(\alpha_{4}+\alpha_{5}\right)\left(2\beta_{1}+\beta_{2}\right)k^{2}\right)}$	$-\frac{2i\sqrt{2}k\left(3\alpha_{0}+4\left(\beta_{1}+2\beta_{2}+3\left(\alpha_{4}+\alpha_{5}\right)k^{2}\right)\right)}{\left(1+2k^{2}\right)^{2}\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+2\beta_{2}\right)+8\left(\alpha_{4}+\alpha_{5}\right)\left(2\beta_{1}+\beta_{2}\right)k^{2}\right)}$	0	$\frac{4k^{2}\left(3\alpha_{0}+4\left(\beta_{1}+2\beta_{2}+3\left(\alpha_{4}+\alpha_{5}\right)k^{2}\right)\right)}{\left(1+2k^{2}\right)^{2}\left(-3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+2\beta_{2}\right)+8\left(\alpha_{4}+\alpha_{5}\right)\left(2\beta_{1}+\beta_{2}\right)k^{2}\right)}$

	${}^{2^+}\sigma^{\parallel}{}_{\alpha\beta}$	${}^{2^+}\tau^{\parallel}{}_{\alpha\beta}$	${}^{2^-}\sigma^{\parallel}{}_{\alpha\beta\chi}$
${}^{2^+}\sigma^{\parallel}\dagger^{\alpha\beta}$	$\frac{16\beta_{1}}{-\alpha_{0}^{2}+4\alpha_{0}\beta_{1}+16\left(\alpha_{1}+\alpha_{4}\right)\beta_{1}k^{2}}$	$\frac{2i\sqrt{2}\left(\alpha_{0}-4\beta_{1}\right)}{\alpha_{0}\left(\alpha_{0}-4\beta_{1}\right)k-16\left(\alpha_{1}+\alpha_{4}\right)\beta_{1}k^{3}}$	0
${}^{2^+}\tau^{\parallel}\dagger^{\alpha\beta}$	$\frac{2i\sqrt{2}\left(\alpha_{0}-4\beta_{1}\right)}{-\alpha_{0}\left(\alpha_{0}-4\beta_{1}\right)k+16\left(\alpha_{1}+\alpha_{4}\right)\beta_{1}k^{3}}$	$\frac{2\left(\alpha_{0}-4\beta_{1}-4\left(\alpha_{1}+\alpha_{4}\right)k^{2}\right)}{\alpha_{0}\left(\alpha_{0}-4\beta_{1}\right)k^{2}-16\left(\alpha_{1}+\alpha_{4}\right)\beta_{1}k^{4}}$	0
${}^{2^-}\sigma^{\parallel}\dagger^{\alpha\beta\chi}$	0	0	$\frac{1}{-\frac{\alpha_{0}}{4}+\beta_{1}+\left(\alpha_{1}+\alpha_{2}\right)k^{2}}$

Source constraints

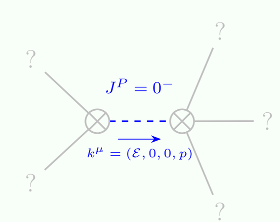
Spin-parity form	Covariant form	Multiplicities
${}^{0^+}\tau^{\perp} == 0$	$\partial_{\beta}\partial_{\alpha}\tau\left(\Delta+\mathcal{K}\right)^{\alpha\beta} == 0$	1
${}^{0^+}\tau^{\perp} == 0$	$\partial_{\beta}\partial_{\alpha}\tau\left(\Delta+\mathcal{K}\right)^{\alpha\beta} == 0$	1
$2ik\;{}^{1^-}\sigma^{\perp\alpha}+{}^{1^-}\tau^{\perp\alpha} == 0$	$\partial_{\chi}\partial_{\beta}\partial^{\alpha}\tau\left(\Delta+\mathcal{K}\right)^{\beta\chi} == \partial_{\chi}\partial^{\chi}\partial_{\beta}\tau\left(\Delta+\mathcal{K}\right)^{\alpha\beta}+2\partial_{\delta}\partial^{\delta}\partial_{\chi}\partial_{\beta}\sigma^{\beta\alpha\chi}$	3
${}^{1^-}\tau^{\parallel\alpha} == 0$	$\partial_{\chi}\partial_{\beta}\partial^{\alpha}\tau\left(\Delta+\mathcal{K}\right)^{\beta\chi} == \partial_{\chi}\partial^{\chi}\partial_{\beta}\tau\left(\Delta+\mathcal{K}\right)^{\beta\alpha}$	3
$ik\;{}^{1^+}\sigma^{\perp\alpha\beta}+{}^{1^+}\tau^{\parallel\alpha\beta} == 0$	$\partial_{\chi}\partial^{\alpha}\tau\left(\Delta+\mathcal{K}\right)^{\beta\chi}+\partial_{\chi}\partial^{\beta}\tau\left(\Delta+\mathcal{K}\right)^{\chi\alpha}+\partial_{\chi}\partial^{\chi}\tau\left(\Delta+\mathcal{K}\right)^{\alpha\beta}+2\partial_{\delta}\partial_{\chi}\partial^{\alpha}\sigma^{\chi\beta\delta}+2\partial_{\delta}\partial^{\delta}\partial_{\chi}\sigma^{\chi\alpha\beta} == \partial_{\chi}\partial^{\alpha}\tau\left(\Delta+\mathcal{K}\right)^{\chi\beta}+\partial_{\chi}\partial^{\beta}\tau\left(\Delta+\mathcal{K}\right)^{\alpha\chi}+\partial_{\chi}\partial^{\chi}\tau\left(\Delta+\mathcal{K}\right)^{\beta\alpha}+2\partial_{\delta}\partial_{\chi}\partial^{\beta}\sigma^{\chi\alpha\delta}$	3
Total expected gauge generators:		11

Massive spectrum



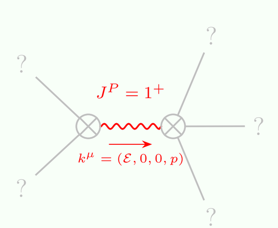
Massive particle

Pole residue:	$\frac{1}{\alpha_{0}}+\frac{\alpha_{4}+\alpha_{6}+2\beta_{2}}{2\alpha_{4}\beta_{2}+2\alpha_{6}\beta_{2}}>0$
Square mass:	$\frac{\alpha_{0}\left(\alpha_{0}+2\beta_{2}\right)}{4\left(\alpha_{4}+\alpha_{6}\right)\beta_{2}}>0$
Spin:	0
Parity:	Even



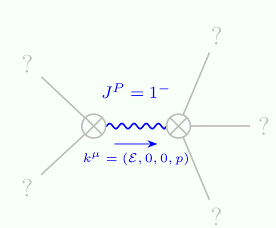
Massive particle

Pole residue:	$-\frac{1}{\alpha_{2}+\alpha_{3}}>0$
Square mass:	$-\frac{\alpha_{0}+8\beta_{3}}{2\left(\alpha_{2}+\alpha_{3}\right)}>0$
Spin:	0
Parity:	Odd



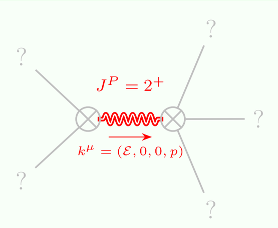
Massive particle

Pole residue:	$\left(3\left(\alpha_{0}^{2}\left(3\alpha_{2}+3\alpha_{5}+2\beta_{1}+4\beta_{3}\right)-8\alpha_{0}\left(\beta_{1}^{2}+\alpha_{2}\left(\beta_{1}-4\beta_{3}\right)+\alpha_{5}\left(\beta_{1}-4\beta_{3}\right)-4\beta_{3}^{2}\right)+16\left(-4\beta_{1}\beta_{3}\left(\beta_{1}+2\beta_{3}\right)+\alpha_{2}\left(\beta_{1}^{2}+8\beta_{3}^{2}\right)+\alpha_{5}\left(\beta_{1}^{2}+8\beta_{3}^{2}\right)\right)\right)\right)/\left(2\left(\alpha_{2}+\alpha_{5}\right)\left(\beta_{1}+2\beta_{3}\right)\left(3\alpha_{0}^{2}-12\alpha_{0}\left(\beta_{1}-2\beta_{3}\right)+16\left(\alpha_{5}\beta_{1}+2\alpha_{5}\beta_{3}-6\beta_{1}\beta_{3}+\alpha_{2}\left(\beta_{1}+2\beta_{3}\right)\right)\right)\right)>0$
Square mass:	$\frac{3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+8\beta_{3}\right)}{16\left(\alpha_{2}+\alpha_{5}\right)\left(\beta_{1}+2\beta_{3}\right)}>0$
Spin:	1
Parity:	Even



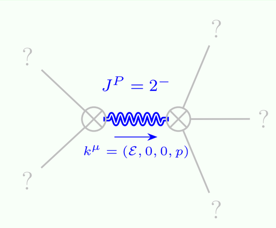
Massive particle

Pole residue:	$-\left(\left(3\left(\alpha_{0}^{2}\left(3\alpha_{4}+3\alpha_{5}+4\beta_{1}+2\beta_{2}\right)+4\alpha_{0}\left(-2\alpha_{4}\beta_{1}-2\alpha_{5}\beta_{1}-4\beta_{1}^{2}+2\alpha_{4}\beta_{2}+2\alpha_{5}\beta_{2}+\beta_{2}^{2}\right)+8\left(-2\beta_{1}\beta_{2}\left(2\beta_{1}+\beta_{2}\right)+\alpha_{4}\left(2\beta_{1}^{2}+\beta_{2}^{2}\right)+\alpha_{5}\left(2\beta_{1}^{2}+\beta_{2}^{2}\right)\right)\right)\right)/\left(2\left(\alpha_{4}+\alpha_{5}\right)\left(2\beta_{1}+\beta_{2}\right)\left(3\alpha_{0}^{2}+6\alpha_{0}\left(-2\beta_{1}+\beta_{2}\right)+4\left(2\alpha_{5}\beta_{1}+\alpha_{5}\beta_{2}-6\beta_{1}\beta_{2}+\alpha_{4}\left(2\beta_{1}+\beta_{2}\right)\right)\right)\right)\right)>0$
Square mass:	$\frac{3\left(\alpha_{0}-4\beta_{1}\right)\left(\alpha_{0}+2\beta_{2}\right)}{8\left(\alpha_{4}+\alpha_{5}\right)\left(2\beta_{1}+\beta_{2}\right)}>0$
Spin:	1
Parity:	Odd



Massive particle

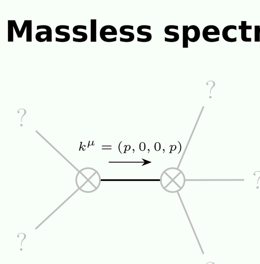
Pole residue:	$-\frac{2}{\alpha_{0}}+\frac{\alpha_{1}+\alpha_{4}+2\beta_{1}}{2\alpha_{1}\beta_{1}+2\alpha_{4}\beta_{1}}>0$
Square mass:	$\frac{\alpha_{0}\left(\alpha_{0}-4\beta_{1}\right)}{16\left(\alpha_{1}+\alpha_{4}\right)\beta_{1}}>0$
Spin:	2
Parity:	Even



Massive particle

Pole residue:	$-\frac{1}{\alpha_{1}+\alpha_{2}}>0$
Square mass:	$\frac{\alpha_{0}-4\beta_{1}}{4\left(\alpha_{1}+\alpha_{2}\right)}>0$
Spin:	2
Parity:	Odd

Massless spectrum



Massless particle

Pole residue:	$\frac{p^{2}}{\alpha_{0}}>0$
Polarisations:	2

Unitarity conditions

(Demonstrably impossible)