PSALTer results panel

Wave operator and propagator

	$1^+\mathcal{A}^\parallel_{\alpha\beta}$	$1^+\mathcal{A}^\perp_{\alpha\beta}$	$1^+f^\parallel_{\alpha\beta}$	$1^-\mathcal{B}_\alpha$	$1^-\mathcal{A}^\parallel_\alpha$	$1^-\mathcal{A}^\perp_\alpha$	$1^-f^\parallel_\alpha$	$1^-f^\perp_\alpha$
$1^+\mathcal{A}^\parallel\dagger^{\alpha\beta}$	$\frac{1}{6}(-6\lambda+6k^2(2r_3+r_5)+t_1+4t_2)$	$-\frac{6\lambda+t_1-2t_2}{3\sqrt{2}}$	$-\frac{ik(6\lambda+t_1-2t_2)}{3\sqrt{2}}$	0	0	0 0		0
$1^+\mathcal{A}^\perp\dagger^{\alpha\beta}$	$-\frac{6\lambda+t_1-2t_2}{3\sqrt{2}}$	$\frac{t_1+t_2}{3}$	$\frac{1}{3}ik(t_1+t_2)$	0	0	0 0		0
$1^+f^\parallel\dagger^{\alpha\beta}$	$\frac{ik(6\lambda+t_1-2t_2)}{3\sqrt{2}}$	$-\frac{1}{3}ik(t_1+t_2)$	$\frac{1}{3}k^2(t_1+t_2)$	0	0	0 0		0
$1^-\mathcal{B}\dagger^\alpha$	0	0	0	$-6\lambda+\frac{v}{2}+4k^2(r_1+r_4+r_5)$	$-2\lambda+\frac{v}{6}+2k^2(r_1+r_4+r_5)$	$\frac{12\lambda-v}{6\sqrt{2}}$	0	$\frac{1}{6}ik(12\lambda-v)$
$1^-\mathcal{A}^\parallel\dagger^\alpha$	0	0	0	$-2\lambda+\frac{v}{6}+2k^2(r_1+r_4+r_5)$	$\frac{1}{18}(-6\lambda+v+3(6k^2(r_1+r_4+r_5)+t_1))$	$\frac{24\lambda-v+6t_1}{18\sqrt{2}}$	0	$\frac{1}{18}ik(24\lambda-v+6t_1)$
$1^-\mathcal{A}^\perp\dagger^\alpha$	0	0	0	$\frac{12\lambda-v}{6\sqrt{2}}$	$\frac{24\lambda-v+6t_1}{18\sqrt{2}}$	$\frac{1}{36}(12\lambda+v+12t_1)$	0	$\frac{ik(12\lambda+v+12t_1)}{18\sqrt{2}}$
$1^-f^\parallel\dagger^\alpha$	0	0	0	0	0	0 0		0
$1^-f^\perp\dagger^\alpha$	0	0	0	$k(-2i\lambda+\frac{iv}{6})$	$-\frac{1}{18}ik(24\lambda-v+6t_1)$	$-\frac{ik(12\lambda+v+12t_1)}{18\sqrt{2}}$	0	$\frac{1}{18}k^2(12\lambda+v+12t_1)$

	$2^+\sigma^\parallel_{\alpha\beta}$	$2^+\tau^\parallel_{\alpha\beta}$	$2^-\sigma^\parallel_{\alpha\beta\chi}$
$2^+\sigma^\parallel\dagger^{\alpha\beta}$	$\frac{k^2(\lambda+t_1)}{k^4(2r_1-2r_3+r_4)(\lambda+t_1)-\frac{1}{2}k^2\lambda(2\lambda+t_1)}$	$\frac{i\sqrt{2}(2\lambda+t_1)}{2k^3(2r_1-2r_3+r_4)(\lambda+t_1)-k\lambda(2\lambda+t_1)}$	0
$2^+\tau^\parallel\dagger^{\alpha\beta}$	$-\frac{i\sqrt{2}(2\lambda+t_1)}{2k^3(2r_1-2r_3+r_4)(\lambda+t_1)-k\lambda(2\lambda+t_1)}$	$\frac{\lambda+k^2(2r_1-2r_3+r_4)+\frac{t_1}{2}}{k^4(2r_1-2r_3+r_4)(\lambda+t_1)-\frac{1}{2}k^2\lambda(2\lambda+t_1)}$	0
$2^-\sigma^\parallel\dagger^{\alpha\beta\chi}$	0	0	$\frac{1}{\lambda+k^2r_1+\frac{t_1}{2}}$

	$2^+\mathcal{A}^\parallel_{\alpha\beta}$	$2^+f^\parallel_{\alpha\beta}$	$2^-\mathcal{A}^\parallel_{\alpha\beta\chi}$
$2^+\mathcal{A}^\parallel\dagger^{\alpha\beta}$	$\lambda+k^2(2r_1-2r_3+r_4)+\frac{t_1}{2}$	$-\frac{ik(2\lambda+t_1)}{\sqrt{2}}$	0
$2^+f^\parallel\dagger^{\alpha\beta}$	$\frac{ik(2\lambda+t_1)}{\sqrt{2}}$	$k^2(\lambda+t_1)$	0
$2^-\mathcal{A}^\parallel\dagger^{\alpha\beta\chi}$	0 0		$\lambda+k^2r_1+\frac{t_1}{2}$

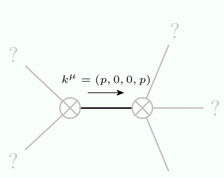
$$
\begin{aligned}
S == \iiiint(&\phi\,\rho+\sigma^{\alpha\beta\chi}\,\mathcal{A}_{\alpha\beta\chi}+\tau^{\alpha\beta}\,f_{\alpha\beta}+\mathcal{J}^\alpha\,\mathcal{B}_\alpha-\\
&\tfrac{1}{18}v(\mathcal{A}^{\alpha\beta}{}_\alpha\,\mathcal{A}_\beta{}^\chi{}_\chi-9\,\mathcal{B}_\alpha\,\mathcal{B}^\alpha+18\,\mathcal{B}^\alpha\,\partial_\alpha\phi-6\,\mathcal{B}^\alpha\,\partial_\alpha f^\beta{}_\beta+6\,\mathcal{A}_\alpha{}^\beta{}_\beta\,(\mathcal{B}^\alpha-\partial^\alpha\phi)-9\,\partial_\alpha\phi\,\partial^\alpha\phi+6\,\partial_\alpha f^\beta{}_\beta\partial^\alpha\phi+\\
&\quad 6\,\mathcal{B}^\alpha\,\partial_\beta f_\alpha{}^\beta-6\,\partial^\alpha\phi\,\partial_\beta f_\alpha{}^\beta-2\,\mathcal{A}_\alpha{}^\chi{}_\chi\,\partial_\beta f^{\alpha\beta}+2\,\mathcal{A}_\beta{}^\chi{}_\chi\,\partial^\beta f^\alpha{}_\alpha-\partial_\beta f^\chi{}_\chi\partial^\beta f^\alpha{}_\alpha-\partial_\beta f^{\alpha\beta}\partial_\chi f_\alpha{}^\chi+2\,\partial^\beta f^\alpha{}_\alpha\partial_\chi f_\beta{}^\chi)+\\
&\tfrac{1}{6}\lambda(8\,\mathcal{A}^{\alpha\beta}{}_\alpha\,\mathcal{A}_\beta{}^\chi{}_\chi+24\,\mathcal{A}_\alpha{}^\beta{}_\beta\,\mathcal{B}^\alpha-36\,\mathcal{B}_\alpha\,\mathcal{B}^\alpha-36\,\partial_\alpha\mathcal{B}^\alpha-72\,\phi\,\partial_\alpha\mathcal{B}^\alpha+12\,f^{\alpha\beta}\,\partial_\beta\mathcal{A}_\alpha{}^\chi{}_\chi-12\,\partial_\beta\mathcal{A}^{\alpha\beta}{}_\alpha-\\
&\quad 24\,\phi\,\partial_\beta\mathcal{A}^{\alpha\beta}{}_\alpha-4\,\mathcal{A}_\alpha{}^\chi{}_\chi\,\partial_\beta f^{\alpha\beta}-24\,f^{\alpha\beta}\,\partial_\beta\mathcal{B}_\alpha+24\,f^\alpha{}_\alpha\,\partial_\beta\mathcal{B}^\beta+4\,\mathcal{A}_\beta{}^\chi{}_\chi\,\partial^\beta f^\alpha{}_\alpha-2\,\partial_\beta f^\chi{}_\chi\partial^\beta f^\alpha{}_\alpha-\\
&\quad 12\,f^{\alpha\beta}\,\partial_\chi\mathcal{A}_\alpha{}^\chi{}_\beta+12\,f^\alpha{}_\alpha\,\partial_\chi\mathcal{A}^{\beta\chi}{}_\beta-2\,\partial_\beta f^{\alpha\beta}\partial_\chi f_\alpha{}^\chi+4\,\partial^\beta f^\alpha{}_\alpha\partial_\chi f_\beta{}^\chi-6\,\partial_\alpha f_{\beta\chi}\partial^\chi f^{\alpha\beta}-3\,\partial_\alpha f_\chi{}_\beta\partial^\chi f^{\alpha\beta}+\\
&\quad 3\,\partial_\beta f_{\alpha\chi}\partial^\chi f^{\alpha\beta}+3\,\partial_\chi f_{\alpha\beta}\partial^\chi f^{\alpha\beta}+3\,\partial_\chi f_{\beta\alpha}\partial^\chi f^{\alpha\beta}+12\,\mathcal{A}_{\alpha\chi\beta}(\mathcal{A}^{\alpha\beta\chi}+\partial^\chi f^{\alpha\beta}))+\tfrac{1}{6}t_2\\
&((4\,\mathcal{A}_{\beta\chi\alpha}+2\,\partial_\alpha f_{\beta\chi}-\partial_\alpha f_{\chi\beta}-\partial_\beta f_{\alpha\chi}+\partial_\chi f_{\alpha\beta}-\partial_\chi f_{\beta\alpha})\partial^\chi f^{\alpha\beta}-4\,\mathcal{A}_{\alpha\chi\beta}(\mathcal{A}^{\alpha\beta\chi}+\partial^\chi f^{\alpha\beta})+2\,\mathcal{A}_{\alpha\beta\chi}\,(\mathcal{A}^{\alpha\beta\chi}+2\,\partial^\chi f^{\alpha\beta}))+\\
&\tfrac{1}{3}t_1(\mathcal{A}^{\alpha\beta}{}_\alpha\,\mathcal{A}_\beta{}^\chi{}_\chi-2\,\mathcal{A}_\alpha{}^\chi{}_\chi\,\partial_\beta f^{\alpha\beta}+2\,\mathcal{A}_\beta{}^\chi{}_\chi\,\partial^\beta f^\alpha{}_\alpha-\partial_\beta f^\chi{}_\chi\partial^\beta f^\alpha{}_\alpha-\partial_\beta f^{\alpha\beta}\partial_\chi f_\alpha{}^\chi+2\,\partial^\beta f^\alpha{}_\alpha\partial_\chi f_\beta{}^\chi+\\
&\quad 2\,\mathcal{A}_{\beta\chi\alpha}\,\partial^\chi f^{\alpha\beta}-2\,\partial_\alpha f_{\beta\chi}\partial^\chi f^{\alpha\beta}-2\,\partial_\alpha f_\chi{}_\beta\partial^\chi f^{\alpha\beta}+\partial_\beta f_{\alpha\chi}\partial^\chi f^{\alpha\beta}+2\,\partial_\chi f_{\alpha\beta}\partial^\chi f^{\alpha\beta}+\\
&\quad \partial_\chi f_{\beta\alpha}\partial^\chi f^{\alpha\beta}+\mathcal{A}_{\alpha\beta\chi}\,(\mathcal{A}^{\alpha\beta\chi}+2\,\partial^\chi f^{\alpha\beta})+\mathcal{A}_{\alpha\chi\beta}(\mathcal{A}^{\alpha\beta\chi}+4\,\partial^\chi f^{\alpha\beta}))+\\
&r_5(4\,\partial_\alpha\mathcal{A}_\beta{}^\chi{}_\chi\,\partial^\beta\mathcal{B}^\alpha-4\,\partial_\alpha\mathcal{B}_\beta\partial^\beta\mathcal{B}^\alpha-4\,\partial_\beta\mathcal{A}_\alpha{}^\chi{}_\chi\,\partial^\beta\mathcal{B}^\alpha+4\,\partial_\beta\mathcal{B}_\alpha\partial^\beta\mathcal{B}^\alpha+4\,\partial^\beta\mathcal{B}^\alpha\partial_\chi\mathcal{A}_\alpha{}^\chi{}_\beta-4\,\partial^\beta\mathcal{B}^\alpha\partial_\chi\mathcal{A}_\beta{}^\chi{}_\alpha+\\
&\quad \partial_\beta\mathcal{A}_\chi{}^\delta{}_\delta\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_\alpha-\partial_\chi\mathcal{A}_\beta{}^\delta{}_\delta\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_\alpha-\partial_\alpha\mathcal{A}^{\alpha\beta\chi}\,\partial_\delta\mathcal{A}_\beta{}^\delta{}_\chi+2\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_\alpha\partial_\delta\mathcal{A}_\beta{}^\delta{}_\chi+\partial_\alpha\mathcal{A}^{\alpha\beta\chi}\,\partial_\delta\mathcal{A}_\chi{}^\delta{}_\beta-2\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_\alpha\partial_\delta\mathcal{A}_\chi{}^\delta{}_\beta)+\\
&r_4(-4\,\partial_\alpha\mathcal{A}_\beta{}^\chi{}_\chi\,\partial^\beta\mathcal{B}^\alpha+4\,\partial_\alpha\mathcal{B}_\beta\partial^\beta\mathcal{B}^\alpha-4\,\partial_\beta\mathcal{A}_\alpha{}^\chi{}_\chi\,\partial^\beta\mathcal{B}^\alpha+4\,\partial_\beta\mathcal{B}_\alpha\partial^\beta\mathcal{B}^\alpha+4\,\partial^\beta\mathcal{B}^\alpha\partial_\chi\mathcal{A}_\alpha{}^\chi{}_\beta+\\
&\quad 4\,\partial^\beta\mathcal{B}^\alpha\partial_\chi\mathcal{A}_\beta{}^\chi{}_\alpha+8\,\partial_\alpha\mathcal{B}^\alpha(2\,\partial_\beta\mathcal{B}^\beta+\partial_\chi\mathcal{A}^{\beta\chi}{}_\beta)-\partial_\beta\mathcal{A}_\chi{}^\delta{}_\delta\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_\alpha-\partial_\chi\mathcal{A}_\beta{}^\delta{}_\delta\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_\alpha-\\
&\quad \partial_\alpha\mathcal{A}^{\alpha\beta\chi}\,\partial_\delta\mathcal{A}_\beta{}^\delta{}_\chi+2\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_\alpha\partial_\delta\mathcal{A}_\beta{}^\delta{}_\chi-\partial_\alpha\mathcal{A}^{\alpha\beta\chi}\,\partial_\delta\mathcal{A}_\chi{}^\delta{}_\beta+2\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_\alpha\partial_\delta\mathcal{A}_\chi{}^\delta{}_\beta)+\\
&\tfrac{1}{3}r_2(4\,\partial_\beta\mathcal{A}_{\alpha\chi\delta}-2\,\partial_\beta\mathcal{A}_{\alpha\delta\chi}+2\,\partial_\beta\mathcal{A}_{\chi\delta\alpha}-\partial_\chi\mathcal{A}_{\alpha\beta\delta}+\partial_\delta\mathcal{A}_{\alpha\beta\chi}-2\,\partial_\delta\mathcal{A}_{\alpha\chi\beta})\partial^\delta\mathcal{A}^{\alpha\beta\chi}-\\
&4r_3(\partial_\alpha\mathcal{B}^\alpha\partial_\beta\mathcal{B}^\beta-2\,\partial_\alpha\mathcal{A}_\beta{}^\chi{}_\chi\,\partial^\beta\mathcal{B}^\alpha+2\,\partial_\alpha\mathcal{B}_\beta\partial^\beta\mathcal{B}^\alpha+2\,\partial^\beta\mathcal{B}^\alpha\partial_\chi\mathcal{A}_\beta{}^\chi{}_\alpha+\partial_\beta\mathcal{A}_{\chi\delta\alpha}\partial^\delta\mathcal{A}^{\alpha\beta\chi})+\\
&\tfrac{2}{3}r_1(6\,\partial_\alpha\mathcal{B}^\alpha\partial_\beta\mathcal{B}^\beta-6\,\partial_\alpha\mathcal{A}_\beta{}^\chi{}_\chi\,\partial^\beta\mathcal{B}^\alpha+6\,\partial_\alpha\mathcal{B}_\beta\partial^\beta\mathcal{B}^\alpha-6\,\partial_\beta\mathcal{A}_\alpha{}^\chi{}_\chi\,\partial^\beta\mathcal{B}^\alpha+6\,\partial_\beta\mathcal{B}_\alpha\partial^\beta\mathcal{B}^\alpha+\\
&\quad 6\,\partial^\beta\mathcal{B}^\alpha\partial_\chi\mathcal{A}_\alpha{}^\chi{}_\beta+6\,\partial^\beta\mathcal{B}^\alpha\partial_\chi\mathcal{A}_\beta{}^\chi{}_\alpha-2\,\partial_\beta\mathcal{A}_{\alpha\chi\delta}\partial^\delta\mathcal{A}^{\alpha\beta\chi}+\partial_\beta\mathcal{A}_{\alpha\delta\chi}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi}+2\,\partial_\beta\mathcal{A}_{\chi\delta\alpha}\partial^\delta\mathcal{A}^{\alpha\beta\chi}-\\
&\quad \partial_\chi\mathcal{A}_{\alpha\beta\delta}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi}+\partial_\delta\mathcal{A}_{\alpha\beta\chi}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi}+\partial_\delta\mathcal{A}_{\alpha\chi\beta}\partial^\delta\mathcal{A}^{\alpha\beta\chi}))[t,x,y,z]\,dz\,dy\,dx\,dt
\end{aligned}
$$

	$0^+\mathcal{B}$	$0^+\phi$	$0^+\mathcal{A}^\parallel$	$0^+f^\parallel$	$0^+f^\perp$	$0^-\mathcal{A}^\parallel$
$0^+\mathcal{B}\dagger$	$-6\lambda+\frac{v}{2}+12k^2(r_1-r_3+2r_4)$	$\frac{1}{2}ik(12\lambda-v)$	$\frac{12\lambda-v-24k^2(r_1-r_3+2r_4)}{2\sqrt{6}}$	$-\frac{ik(12\lambda-v)}{2\sqrt{3}}$	0	0
$0^+\phi\dagger$	$k(-6i\lambda+\frac{iv}{2})$	$\frac{k^2v}{2}$	$\frac{ik(12\lambda-v)}{2\sqrt{6}}$	$-\frac{k^2v}{2\sqrt{3}}$	0	0
$0^+\mathcal{A}^\parallel\dagger$	$\frac{12\lambda-v-24k^2(r_1-r_3+2r_4)}{2\sqrt{6}}$	$-\frac{ik(12\lambda-v)}{2\sqrt{6}}$	$-\lambda+\frac{v}{12}+2k^2(r_1-r_3+2r_4)$	$\frac{ik(12\lambda-v)}{6\sqrt{2}}$	0	0
$0^+f^\parallel\dagger$	$\frac{ik(12\lambda-v)}{2\sqrt{3}}$	$-\frac{k^2v}{2\sqrt{3}}$	$-\frac{ik(12\lambda-v)}{6\sqrt{2}}$	$\frac{k^2v}{6}$	0	0
$0^+f^\perp\dagger$	0	0	0 0		0	0
$0^-\mathcal{A}^\parallel\dagger$	0	0	0 0		0	$-2\lambda+k^2r_2+t_2$

	$0^+\mathcal{J}$	$0^+\rho$	$0^+\sigma^\parallel$	$0^+\tau^\parallel$	$0^+\tau^\perp$	$0^-\sigma^\parallel$
$0^+\mathcal{J}\dagger$	$\frac{6v}{49(-12\lambda^2+\lambda v+2k^2v(r_1-r_3+2r_4))}$	$\frac{-36i\lambda+3iv}{28k(-12\lambda^2+\lambda v+2k^2v(r_1-r_3+2r_4))}$	$-\frac{\sqrt{6}v}{49(-12\lambda^2+\lambda v+2k^2v(r_1-r_3+2r_4))}$	$\frac{i\sqrt{3}(12\lambda-v)}{28k(-12\lambda^2+\lambda v+2k^2v(r_1-r_3+2r_4))}$	0	0
$0^+\rho\dagger$	$\frac{3i(12\lambda-v)}{28k(-12\lambda^2+\lambda v+2k^2v(r_1-r_3+2r_4))}$	$\frac{3(-12\lambda+v+24k^2(r_1-r_3+2r_4))}{32k^2(-12\lambda^2+\lambda v+2k^2v(r_1-r_3+2r_4))}$	$-\frac{i(36\lambda-3v)}{28\sqrt{6}k(-12\lambda^2+\lambda v+2k^2v(r_1-r_3+2r_4))}$	$-\frac{\sqrt{3}(-12\lambda+v+24k^2(r_1-r_3+2r_4))}{32k^2(-12\lambda^2+\lambda v+2k^2v(r_1-r_3+2r_4))}$	0	0
$0^+\sigma^\parallel\dagger$	$\frac{\sqrt{6}v}{588\lambda^2-49v(\lambda+2k^2(r_1-r_3+2r_4))}$	$\frac{i\sqrt{\frac{3}{2}}(12\lambda-v)}{28k(-12\lambda^2+\lambda v+2k^2v(r_1-r_3+2r_4))}$	$\frac{v}{49(-12\lambda^2+\lambda v+2k^2v(r_1-r_3+2r_4))}$	$\frac{i}{56\sqrt{2}(\frac{k\lambda}{2}+\frac{k^3v(r_1-r_3+2r_4)}{-12\lambda+v})}$	0	0
$0^+\tau^\parallel\dagger$	$\frac{1}{-\frac{28ik\lambda}{\sqrt{3}}+\frac{56ik^3v(r_1-r_3+2r_4)}{\sqrt{3}(12\lambda-v)}}$	$\frac{\sqrt{3}(-12\lambda+v+24k^2(r_1-r_3+2r_4))}{32k^2(12\lambda^2-v(\lambda+2k^2(r_1-r_3+2r_4)))}$	$-\frac{i}{56\sqrt{2}(\frac{k\lambda}{2}+\frac{k^3v(r_1-r_3+2r_4)}{-12\lambda+v})}$	$\frac{-12\lambda+v+24k^2(r_1-r_3+2r_4)}{32k^2(-12\lambda^2+\lambda v+2k^2v(r_1-r_3+2r_4))}$	0	0
$0^+\tau^\perp\dagger$	0	0	0	0 0		0
$0^-\sigma^\parallel\dagger$	0	0	0	0	0	$\frac{1}{-2\lambda+k^2r_2+t_2}$

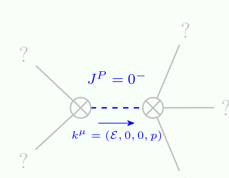
Spin-parity form	Covariant form	Multiplicities
$0^+\tau^\perp == 0$	$\partial_\beta\partial_\alpha\tau^{\alpha\beta} == 0$	1
$0^+\rho+0^+\tau^\parallel == 0$	$\partial_\alpha\partial^\alpha\rho+\partial_\beta\partial^\beta\tau^\alpha{}_\alpha == \partial_\beta\partial_\alpha\tau^{\alpha\beta}$	1
$2\,0^+\sigma^\parallel+0^+\mathcal{J} ==0$	$\partial_\alpha\mathcal{J}^\alpha == 2\,\partial_\beta\sigma^\alpha{}_\alpha{}^\beta$	1
$2\,i\,k\,1^-\sigma^{\parallel\alpha}+1^-\tau^{\perp\alpha}-i\,k\,1^-\mathcal{J}^\alpha == 0$	$\partial_\chi\partial^\chi\partial_\beta\tau^{\alpha\beta}+\partial_\chi\partial^\chi\partial_\beta\partial^\alpha\mathcal{J}^\beta+2\,\partial_\delta\partial^\delta\partial_\chi\partial_\beta\sigma^{\beta\alpha\chi} ==$ $\partial_\chi\partial_\beta\partial^\alpha\tau^{\beta\chi}+\partial_\chi\partial^\chi\partial_\beta\partial^\beta\mathcal{J}^\alpha+2(\partial_\delta\partial^\delta\partial_\chi\partial^\alpha\sigma^\beta{}_\beta{}^\chi+\partial_\delta\partial^\delta\partial_\chi\partial^\chi\sigma^{\beta\alpha}{}_\beta)$	3
$1^-\tau^{\parallel\alpha} == 0$	$\partial_\chi\partial_\beta\partial^\alpha\tau^{\beta\chi} == \partial_\chi\partial^\chi\partial_\beta\tau^{\beta\alpha}$	3
$2\,1^-\sigma^{\parallel\alpha} == 2\,1^-\sigma^{\perp\alpha}+1^-\mathcal{J}^\alpha$	$\partial_\beta\partial^\alpha\mathcal{J}^\beta == \partial_\beta\partial^\beta\mathcal{J}^\alpha+2(\partial_\chi\partial^\alpha\sigma^\beta{}_\beta{}^\chi+\partial_\chi\partial^\chi\sigma^{\beta\alpha}{}_\beta)$	3
$i\,k\,1^+\sigma^{\perp\alpha\beta}+1^+\tau^{\parallel\alpha\beta} == 0$	$\partial_\chi\partial^\alpha\tau^{\beta\chi}+\partial_\chi\partial^\beta\tau^{\chi\alpha}+\partial_\chi\partial^\chi\tau^{\alpha\beta}+2\,\partial_\delta\partial_\chi\partial^\alpha\sigma^{\chi\beta\delta}+2\,\partial_\delta\partial^\delta\partial_\chi\sigma^{\chi\alpha\beta} ==$ $\partial_\chi\partial^\alpha\tau^{\chi\beta}+\partial_\chi\partial^\beta\tau^{\alpha\chi}+\partial_\chi\partial^\chi\tau^{\beta\alpha}+2\,\partial_\delta\partial_\chi\partial^\beta\sigma^{\chi\alpha\delta}$	3
Total expected gauge generators:		15

Massive and massless spectra



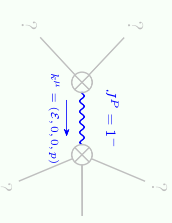
Massless particle

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



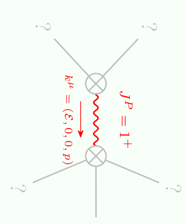
Massive particle

Pole residue:	$-\frac{1}{r_2}>0$
Square mass:	$\frac{2\lambda-t_2}{r_2}>0$
Spin:	0
Parity:	Odd



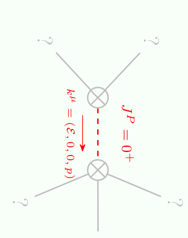
Massive particle

Pole residue:	$-((3(288\lambda^3+v^2(7r_1+7r_4+7r_5-t_1)-12vt_1^2+72(r_1+r_4+r_5)t_1^2+432\lambda^2(3r_1+3r_4+3r_5+t_1)-2\lambda(v^2-72t_1(2r_1+2r_4+2r_5+t_1)+12v(7r_1+7r_4+7r_5+t_1))))/((r_1+r_4+r_5)(12\lambda+v+12t_1)(360\lambda^2-30\lambda v+v(7r_1+7r_4+7r_5-15t_1)+84(r_1+r_4+r_5)t_1+12\lambda(7r_1+7r_4+7r_5+15t_1))))>0$
Square mass:	$\frac{3(12\lambda-v)(2\lambda+t_1)}{2(r_1+r_4+r_5)(12\lambda+v+12t_1)}>0$
Spin:	1
Parity:	Odd



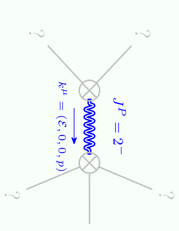
Massive particle

Pole residue:	$\frac{3(r_5t_1^2-t_1^2t_2+2r_5t_2^2-t_1t_2^2+4\lambda^2(6r_3+3r_5+t_1+t_2)+2\lambda(2r_5t_1+t_1^2+4r_3(t_1-2t_2)-4r_5t_2-t_2^2)+2r_3(t_1^2+2t_2^2))}{(2r_3+r_5)(t_1+t_2)(12\lambda^2+2r_5t_1+6\lambda(t_1-t_2)+2r_5t_2-3t_1t_2+4r_3(t_1+t_2))}>0$
Square mass:	$\frac{3(2\lambda+t_1)(2\lambda-t_2)}{2(2r_3+r_5)(t_1+t_2)}>0$
Spin:	1
Parity:	Even



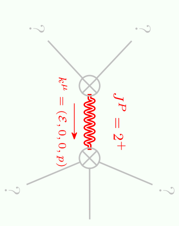
Massive particle

Pole residue:	$\frac{1}{56}(-\frac{7}{\lambda}+\frac{84}{v}+\frac{4}{r_1-r_3+2r_4})>0$
Square mass:	$\frac{12\lambda^2-\lambda v}{2vr_1-2vr_3+4vr_4}>0$
Spin:	0
Parity:	Even



Massive particle

Pole residue:	$-\frac{1}{r_1}>0$
Square mass:	$-\frac{2\lambda+t_1}{2r_1}>0$
Spin:	2
Parity:	Odd



Massive particle

Pole residue:	$\frac{\lambda^2+(2r_1-2r_3+r_4)t_1+\lambda(4r_1-4r_3+2r_4+t_1)}{\lambda(2r_1-2r_3+r_4)(\lambda+t_1)}>0$
Square mass:	$\frac{\lambda(2\lambda+t_1)}{2(2r_1-2r_3+r_4)(\lambda+t_1)}>0$
Spin:	2
Parity:	Even

Unitarity conditions

(Timeout after 10 seconds)