PSALTer results panel

Wave operator and propagator

	$\overset{1^+}{\cdot}\sigma^{\parallel}{}_{\alpha\beta}$	$\overset{1^+}{\cdot}\sigma^{\perp}{}_{\alpha\beta}$	$\overset{1^+}{\cdot}\tau^{\parallel}{}_{\alpha\beta}$	$\overset{1^-}{\cdot}\sigma^{\parallel}{}_{\alpha}$	$\overset{1^-}{\cdot}\sigma^{\perp}{}_{\alpha}$	$\overset{1^-}{\cdot}\tau^{\parallel}{}_{\alpha}$	$\overset{1^-}{\cdot}\tau^{\perp}{}_{\alpha}$
$\overset{1^+}{\cdot}\sigma^{\parallel}\dagger^{\alpha\beta}$	0	$-\frac{2\sqrt{2}}{(1+k^2)(8\beta_1-(\mathcal{M}_{Pl}{}^2))}$	$-\frac{2i\sqrt{2}k}{(1+k^2)(8\beta_1-(\mathcal{M}_{Pl}{}^2))}$	0	0	0	0
$\overset{1^+}{\cdot}\sigma^{\perp}\dagger^{\alpha\beta}$	$-\frac{2\sqrt{2}}{(1+k^2)(8\beta_1-(\mathcal{M}_{Pl}{}^2))}$	$-\frac{2(-8\beta_1+(\mathcal{M}_{Pl}{}^2)+2k^2\theta^2\xi)}{(1+k^2)^2(-8\beta_1+(\mathcal{M}_{Pl}{}^2))^2}$	$-\frac{2ik(-8\beta_1+(\mathcal{M}_{Pl}{}^2)+2k^2\theta^2\xi)}{(1+k^2)^2(-8\beta_1+(\mathcal{M}_{Pl}{}^2))^2}$	0	0	0	0
$\overset{1^+}{\cdot}\tau^{\parallel}\dagger^{\alpha\beta}$	$\frac{2i\sqrt{2}k}{(1+k^2)(8\beta_1-(\mathcal{M}_{Pl}{}^2))}$	$\frac{2ik(-8\beta_1+(\mathcal{M}_{Pl}{}^2)+2k^2\theta^2\xi)}{(1+k^2)^2(-8\beta_1+(\mathcal{M}_{Pl}{}^2))^2}$	$\frac{2k^2(-8\beta_1+(\mathcal{M}_{Pl}{}^2)+2k^2\theta^2\xi)}{(1+k^2)^2(-8\beta_1+(\mathcal{M}_{Pl}{}^2))^2}$	0	0	0	0
$\overset{1^-}{\cdot}\sigma^{\parallel}\dagger^{\alpha}$	0	0	0	$\frac{768\beta_1+4k^2\xi}{-3(\mathcal{M}_{Pl}{}^2)(24(\mathcal{M}_{Pl}{}^2)+k^2(1+8\theta)\xi)+24\beta_1(24(\mathcal{M}_{Pl}{}^2)+(k+4k\theta^2)\xi)}$	$-\frac{4\sqrt{2}(-96\beta_1+36(\mathcal{M}_{Pl}{}^2)+k^2(1+6\theta)\xi)}{3(1+2k^2)(24(\mathcal{M}_{Pl}{}^2)(-8\beta_1+(\mathcal{M}_{Pl}{}^2))+k^2(-8\beta_1(1+4\theta)^2+(\mathcal{M}_{Pl}{}^2)+8\theta(\mathcal{M}_{Pl}{}^2))\xi)}$	0	$-\frac{8ik(-96\beta_1+36(\mathcal{M}_{Pl}{}^2)+k^2(1+6\theta)\xi)}{3(1+2k^2)(24(\mathcal{M}_{Pl}{}^2)(-8\beta_1+(\mathcal{M}_{Pl}{}^2))+k^2(-8\beta_1(1+4\theta)^2+(\mathcal{M}_{Pl}{}^2)+8\theta(\mathcal{M}_{Pl}{}^2))\xi)}$
$\overset{1^-}{\cdot}\sigma^{\perp}\dagger^{\alpha}$	0	0	0	$-\frac{4\sqrt{2}(-96\beta_1+36(\mathcal{M}_{Pl}{}^2)+k^2(1+6\theta)\xi)}{3(1+2k^2)(24(\mathcal{M}_{Pl}{}^2)(-8\beta_1+(\mathcal{M}_{Pl}{}^2))+k^2(-8\beta_1(1+4\theta)^2+(\mathcal{M}_{Pl}{}^2)+8\theta(\mathcal{M}_{Pl}{}^2))\xi)}$	$\frac{8(48\beta_1+18(\mathcal{M}_{Pl}{}^2)+(k+6k\theta^2)\xi)}{3(1+2k^2)^2(24(\mathcal{M}_{Pl}{}^2)(-8\beta_1+(\mathcal{M}_{Pl}{}^2))+k^2(-8\beta_1(1+4\theta)^2+(\mathcal{M}_{Pl}{}^2)+8\theta(\mathcal{M}_{Pl}{}^2))\xi)}$	0	$-\frac{8i\sqrt{2}k(48\beta_1+18(\mathcal{M}_{Pl}{}^2)+(k+6k\theta^2)\xi)}{3(1+2k^2)^2(24(\mathcal{M}_{Pl}{}^2)(-8\beta_1+(\mathcal{M}_{Pl}{}^2))+k^2(-8\beta_1(1+4\theta)^2+(\mathcal{M}_{Pl}{}^2)+8\theta(\mathcal{M}_{Pl}{}^2))\xi)}$
$\overset{1^-}{\cdot}\tau^{\parallel}\dagger^{\alpha}$	0	0	0	0	0	0	0
$\overset{1^-}{\cdot}\tau^{\perp}\dagger^{\alpha}$	0	0	0	$\frac{8ik(-96\beta_1+36(\mathcal{M}_{Pl}{}^2)+k^2(1+6\theta)\xi)}{3(1+2k^2)(24(\mathcal{M}_{Pl}{}^2)(-8\beta_1+(\mathcal{M}_{Pl}{}^2))+k^2(-8\beta_1(1+4\theta)^2+(\mathcal{M}_{Pl}{}^2)+8\theta(\mathcal{M}_{Pl}{}^2))\xi)}$	$\frac{8i\sqrt{2}k(48\beta_1+18(\mathcal{M}_{Pl}{}^2)+(k+6k\theta^2)\xi)}{3(1+2k^2)^2(24(\mathcal{M}_{Pl}{}^2)(-8\beta_1+(\mathcal{M}_{Pl}{}^2))+k^2(-8\beta_1(1+4\theta)^2+(\mathcal{M}_{Pl}{}^2)+8\theta(\mathcal{M}_{Pl}{}^2))\xi)}$	0	$-\frac{16k^2(48\beta_1+18(\mathcal{M}_{Pl}{}^2)+(k+6k\theta^2)\xi)}{3(1+2k^2)^2(24(\mathcal{M}_{Pl}{}^2)(-8\beta_1+(\mathcal{M}_{Pl}{}^2))+k^2(-8\beta_1(1+4\theta)^2+(\mathcal{M}_{Pl}{}^2)+8\theta(\mathcal{M}_{Pl}{}^2))\xi)}$

	$\overset{1^+}{\cdot}\mathcal{A}^{\parallel}{}_{\alpha\beta}$	$\overset{1^+}{\cdot}\mathcal{A}^{\perp}{}_{\alpha\beta}$	$\overset{1^+}{\cdot}f^{\parallel}{}_{\alpha\beta}$	$\overset{1^-}{\cdot}\mathcal{A}^{\parallel}{}_{\alpha}$	$\overset{1^-}{\cdot}\mathcal{A}^{\perp}{}_{\alpha}$	$\overset{1^-}{\cdot}f^{\parallel}{}_{\alpha}$	$\overset{1^-}{\cdot}f^{\perp}{}_{\alpha}$
$\overset{1^+}{\cdot}\mathcal{A}^{\parallel}\dagger^{\alpha\beta}$	$\frac{1}{4}(-8\beta_1+(\mathcal{M}_{Pl}{}^2)+2k^2\theta^2\xi)$	$\frac{-8\beta_1+(\mathcal{M}_{Pl}{}^2)}{2\sqrt{2}}$	$-\frac{ik(8\beta_1-(\mathcal{M}_{Pl}{}^2))}{2\sqrt{2}}$	0	0 0		0
$\overset{1^+}{\cdot}\mathcal{A}^{\perp}\dagger^{\alpha\beta}$	$\frac{-8\beta_1+(\mathcal{M}_{Pl}{}^2)}{2\sqrt{2}}$	0	0	0	0 0		0
$\overset{1^+}{\cdot}f^{\parallel}\dagger^{\alpha\beta}$	$\frac{ik(8\beta_1-(\mathcal{M}_{Pl}{}^2))}{2\sqrt{2}}$	0	0	0	0 0		0
$\overset{1^-}{\cdot}\mathcal{A}^{\parallel}\dagger^{\alpha}$	0 0		0	$\frac{1}{72}(48\beta_1+18(\mathcal{M}_{Pl}{}^2)+(k+6k\theta^2\xi)$	$\frac{96\beta_1-36(\mathcal{M}_{Pl}{}^2)-k^2(1+6\theta)\xi}{72\sqrt{2}}$	0	$-\frac{1}{72}ik(-96\beta_1+36(\mathcal{M}_{Pl}{}^2)+k^2(1+6\theta)\xi)$
$\overset{1^-}{\cdot}\mathcal{A}^{\perp}\dagger^{\alpha}$	0 0		0	$\frac{96\beta_1-36(\mathcal{M}_{Pl}{}^2)-k^2(1+6\theta)\xi}{72\sqrt{2}}$	$\frac{4\beta_1}{3}+\frac{k^2\xi}{144}$	0	$\frac{i(192\beta_1k+k^3\xi)}{72\sqrt{2}}$
$\overset{1^-}{\cdot}f^{\parallel}\dagger^{\alpha}$	0 0		0	0	0 0		0
$\overset{1^-}{\cdot}f^{\perp}\dagger^{\alpha}$	0 0		0	$\frac{1}{72}ik(-96\beta_1+36(\mathcal{M}_{Pl}{}^2)+k^2(1+6\theta)\xi)$	$-\frac{i(192\beta_1k+k^3\xi)}{72\sqrt{2}}$	0	$\frac{8\beta_1k^2}{3}+\frac{k^4\xi}{72}$

$$
\begin{aligned}
\mathcal{S} ==& \iiiint\Big(\mathcal{A}^{\alpha\beta\chi}\ \sigma_{\alpha\beta\chi}+f^{\alpha\beta}\ \tau(\Delta+\mathcal{K})_{\alpha\beta}-\frac{1}{2}(\mathcal{M}_{Pl}{}^2)(\mathcal{A}_{\iota\kappa\theta}\mathcal{A}^{\iota\theta\kappa}+\mathcal{A}^{\iota\theta}{}_{\iota}\mathcal{A}_{\theta}{}^{\kappa}{}_{\kappa}+2f^{\iota\theta}\partial_{\theta}\mathcal{A}_{\iota}{}^{\kappa}{}_{\kappa}-2\partial_{\theta}\mathcal{A}^{\iota\theta}{}_{\iota}-\\
&\quad 2f^{\iota\theta}\partial_{\kappa}\mathcal{A}_{\iota}{}^{\kappa}{}_{\theta}+2f^{\iota}{}_{\iota}\partial_{\kappa}\mathcal{A}^{\theta\kappa}{}_{\theta})-\\
&\frac{1}{2}\theta^2\xi(\partial_{\theta}\mathcal{A}_{\iota}{}^{\kappa}{}_{\kappa}\partial^{\theta}\mathcal{A}^{\alpha\iota}{}_{\alpha}+\partial_{\alpha}\mathcal{A}^{\alpha\iota\theta}\partial_{\kappa}\mathcal{A}_{\iota}{}^{\kappa}{}_{\theta}-2\partial^{\theta}\mathcal{A}^{\alpha\iota}{}_{\alpha}\partial_{\kappa}\mathcal{A}_{\iota}{}^{\kappa}{}_{\theta}+\partial_{\iota}\mathcal{A}_{\theta\kappa\alpha}\partial^{\kappa}\mathcal{A}^{\alpha\iota\theta})-\\
&\alpha_3(\partial_{\iota}\mathcal{A}_{\theta}{}^{\kappa}{}_{\kappa}\partial^{\theta}\mathcal{A}^{\alpha\iota}{}_{\alpha}+\partial_{\alpha}\mathcal{A}^{\alpha\iota\theta}\partial_{\kappa}\mathcal{A}_{\theta}{}^{\kappa}{}_{\iota}-2\partial^{\theta}\mathcal{A}^{\alpha\iota}{}_{\alpha}\partial_{\kappa}\mathcal{A}_{\theta}{}^{\kappa}{}_{\iota}+\partial_{\iota}\mathcal{A}_{\theta\kappa\alpha}\partial^{\kappa}\mathcal{A}^{\alpha\iota\theta})+\\
&\frac{2}{3}\beta_1(2\mathcal{A}^{\iota\theta}{}_{\iota}\mathcal{A}_{\theta}{}^{\kappa}{}_{\kappa}-4\mathcal{A}_{\iota}{}^{\kappa}{}_{\kappa}\partial_{\theta}f^{\iota\theta}+4\mathcal{A}_{\theta}{}^{\kappa}{}_{\kappa}\partial^{\theta}f^{\iota}{}_{\iota}-2\partial_{\theta}f^{\kappa}{}_{\kappa}\partial^{\theta}f^{\iota}{}_{\iota}-2\partial_{\theta}f^{\iota\theta}\partial_{\kappa}f_{\iota}{}^{\kappa}+\\
&\quad 4\partial^{\theta}f^{\iota}{}_{\iota}\partial_{\kappa}f_{\theta}{}^{\kappa}-6\partial_{\iota}f_{\theta\kappa}\partial^{\kappa}f^{\iota\theta}-3\partial_{\iota}f_{\kappa\theta}\partial^{\kappa}f^{\iota\theta}+3\partial_{\theta}f_{\iota\kappa}\partial^{\kappa}f^{\iota\theta}+\\
&\quad 3\partial_{\kappa}f_{\iota\theta}\partial^{\kappa}f^{\iota\theta}+3\partial_{\kappa}f_{\theta\iota}\partial^{\kappa}f^{\iota\theta}+6\mathcal{A}_{\iota\kappa\theta}(\mathcal{A}^{\iota\theta\kappa}+2\partial^{\kappa}f^{\iota\theta}))+\\
&\frac{1}{6}\theta\xi(-\partial_{\iota}\mathcal{A}_{\kappa}{}^{\lambda}{}_{\lambda}\partial^{\kappa}\partial_{\theta}f^{\iota\theta}+\partial_{\kappa}\mathcal{A}_{\iota}{}^{\lambda}{}_{\lambda}\partial^{\kappa}\partial_{\theta}f^{\iota\theta}+\partial_{\theta}\mathcal{A}_{\kappa}{}^{\lambda}{}_{\lambda}(\partial^{\kappa}\mathcal{A}^{\iota\theta}{}_{\iota}+\partial^{\kappa}\partial^{\theta}f^{\iota}{}_{\iota})-\\
&\quad \partial_{\kappa}\mathcal{A}_{\theta}{}^{\lambda}{}_{\lambda}(\partial^{\kappa}\mathcal{A}^{\iota\theta}{}_{\iota}+\partial^{\kappa}\partial^{\theta}f^{\iota}{}_{\iota})-\partial^{\kappa}\partial_{\theta}f^{\iota\theta}\partial_{\lambda}\mathcal{A}_{\iota}{}^{\lambda}{}_{\kappa}+\partial^{\kappa}\mathcal{A}^{\iota\theta}{}_{\iota}\partial_{\lambda}\mathcal{A}_{\theta}{}^{\lambda}{}_{\kappa}+\\
&\quad \partial^{\kappa}\partial^{\theta}f^{\iota}{}_{\iota}\partial_{\lambda}\mathcal{A}_{\theta}{}^{\lambda}{}_{\kappa}+\partial^{\kappa}\partial_{\theta}f^{\iota\theta}\partial_{\lambda}\mathcal{A}_{\kappa}{}^{\lambda}{}_{\iota}-\partial^{\kappa}\mathcal{A}^{\iota\theta}{}_{\iota}\partial_{\lambda}\mathcal{A}_{\kappa}{}^{\lambda}{}_{\theta}-\partial^{\kappa}\partial^{\theta}f^{\iota}{}_{\iota}\partial_{\lambda}\mathcal{A}_{\kappa}{}^{\lambda}{}_{\theta})+\\
&4\alpha_1\partial_{\theta}\mathcal{A}^{\iota\theta}{}_{\iota}\partial_{\lambda}\mathcal{A}^{\kappa\lambda}{}_{\kappa}+\frac{1}{72}\xi(-2\partial_{\iota}\mathcal{A}_{\kappa}{}^{\lambda}{}_{\lambda}\partial^{\kappa}\partial_{\theta}f^{\iota\theta}+2\partial_{\kappa}\mathcal{A}_{\iota}{}^{\lambda}{}_{\lambda}\partial^{\kappa}\partial_{\theta}f^{\iota\theta}+\\
&\quad \partial_{\theta}\mathcal{A}_{\kappa}{}^{\lambda}{}_{\lambda}(\partial^{\kappa}\mathcal{A}^{\iota\theta}{}_{\iota}+\partial^{\kappa}\partial^{\theta}f^{\iota}{}_{\iota})-\partial_{\kappa}\mathcal{A}_{\theta}{}^{\lambda}{}_{\lambda}(\partial^{\kappa}\mathcal{A}^{\iota\theta}{}_{\iota}+\partial^{\kappa}\partial^{\theta}f^{\iota}{}_{\iota})-\partial^{\kappa}\partial_{\theta}f^{\iota\theta}\partial_{\lambda}\partial_{\iota}f_{\kappa}{}^{\lambda}+\\
&\quad \partial^{\kappa}\partial^{\theta}f^{\iota}{}_{\iota}\partial_{\lambda}\partial_{\theta}f_{\kappa}{}^{\lambda}+\partial^{\kappa}\partial_{\theta}f^{\iota\theta}\partial_{\lambda}\partial_{\kappa}f_{\iota}{}^{\lambda}-\partial^{\kappa}\partial^{\theta}f^{\iota}{}_{\iota}\partial_{\lambda}\partial_{\kappa}f_{\theta}{}^{\lambda})\Big)[t,x,y,z]\,dz\,dy\,dx\,dt
\end{aligned}
$$

Spin-parity form	Covariant form	Multiplicities
$\overset{0^+}{\cdot}\tau^{\perp}==0$	$\partial_{\beta}\partial_{\alpha}\tau(\Delta+\mathcal{K})^{\alpha\beta}==0$	1
$2ik\overset{1^-}{\cdot}\sigma^{\perp\alpha}+\overset{1^-}{\cdot}\tau^{\perp\alpha}==0$	$\partial_{\chi}\partial_{\beta}\partial^{\alpha}\tau(\Delta+\mathcal{K})^{\beta\chi}==\partial_{\chi}\partial^{\chi}\partial_{\beta}\tau(\Delta+\mathcal{K})^{\alpha\beta}+2\partial_{\delta}\partial^{\delta}\partial_{\chi}\partial_{\beta}\sigma^{\beta\alpha\chi}$	3
$\overset{1^-}{\cdot}\tau^{\parallel\alpha}==0$	$\partial_{\chi}\partial_{\beta}\partial^{\alpha}\tau(\Delta+\mathcal{K})^{\beta\chi}==\partial_{\chi}\partial^{\chi}\partial_{\beta}\tau(\Delta+\mathcal{K})^{\beta\alpha}$	3
$ik\overset{1^+}{\cdot}\sigma^{\perp\alpha\beta}+\overset{1^+}{\cdot}\tau^{\parallel\alpha\beta}==0$	$\partial_{\chi}\partial^{\alpha}\tau(\Delta+\mathcal{K})^{\beta\chi}+\partial_{\chi}\partial^{\beta}\tau(\Delta+\mathcal{K})^{\chi\alpha}+$ $\partial_{\chi}\partial^{\chi}\tau(\Delta+\mathcal{K})^{\alpha\beta}+2\partial_{\delta}\partial_{\chi}\partial^{\alpha}\sigma^{\chi\beta\delta}+2\partial_{\delta}\partial^{\delta}\partial_{\chi}\sigma^{\chi\alpha\beta}==$ $\partial_{\chi}\partial^{\alpha}\tau(\Delta+\mathcal{K})^{\chi\beta}+\partial_{\chi}\partial^{\beta}\tau(\Delta+\mathcal{K})^{\alpha\chi}+\partial_{\chi}\partial^{\chi}\tau(\Delta+\mathcal{K})^{\beta\alpha}+2\partial_{\delta}\partial_{\chi}\partial^{\beta}\sigma^{\chi\alpha\delta}$	3
Total expected gauge generators:		10

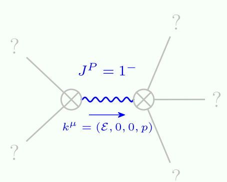
	$\overset{2^+}{\cdot}\mathcal{A}^{\parallel}{}_{\alpha\beta}$	$\overset{2^+}{\cdot}f^{\parallel}{}_{\alpha\beta}$	$\overset{2^-}{\cdot}\mathcal{A}^{\parallel}{}_{\alpha\beta\chi}$
$\overset{2^+}{\cdot}\mathcal{A}^{\parallel}\dagger^{\alpha\beta}$	$2\beta_1-\frac{(\mathcal{M}_{Pl}{}^2)}{4}$	$-\frac{ik(8\beta_1-(\mathcal{M}_{Pl}{}^2))}{2\sqrt{2}}$	0
$\overset{2^+}{\cdot}f^{\parallel}\dagger^{\alpha\beta}$	$\frac{ik(8\beta_1-(\mathcal{M}_{Pl}{}^2))}{2\sqrt{2}}$	$4\beta_1k^2$	0
$\overset{2^-}{\cdot}\mathcal{A}^{\parallel}\dagger^{\alpha\beta\chi}$	0	0	$2\beta_1-\frac{(\mathcal{M}_{Pl}{}^2)}{4}$

	$\overset{2^+}{\cdot}\sigma^{\parallel}{}_{\alpha\beta}$	$\overset{2^+}{\cdot}\tau^{\parallel}{}_{\alpha\beta}$	$\overset{2^-}{\cdot}\sigma^{\parallel}{}_{\alpha\beta\chi}$
$\overset{2^+}{\cdot}\sigma^{\parallel}\dagger^{\alpha\beta}$	$\frac{32\beta_1}{8\beta_1(\mathcal{M}_{Pl}{}^2)-(\mathcal{M}_{Pl}{}^2)^2}$	$\frac{2i\sqrt{2}}{k(\mathcal{M}_{Pl}{}^2)}$	0
$\overset{2^+}{\cdot}\tau^{\parallel}\dagger^{\alpha\beta}$	$-\frac{2i\sqrt{2}}{k(\mathcal{M}_{Pl}{}^2)}$	$\frac{2}{k^2(\mathcal{M}_{Pl}{}^2)}$	0
$\overset{2^-}{\cdot}\sigma^{\parallel}\dagger^{\alpha\beta\chi}$	0 0		$-\frac{4}{-8\beta_1+(\mathcal{M}_{Pl}{}^2)}$

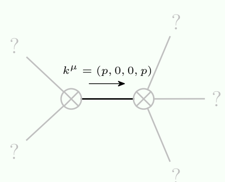
	$\overset{0^+}{\cdot}\sigma^{\parallel}$	$\overset{0^+}{\cdot}\tau^{\parallel}$	$\overset{0^+}{\cdot}\tau^{\perp}$	$\overset{0^-}{\cdot}\sigma^{\parallel}$
$\overset{0^+}{\cdot}\sigma^{\parallel}\dagger$	0	$-\frac{i\sqrt{2}}{k(\mathcal{M}_{Pl}{}^2)}$	0	0
$\overset{0^+}{\cdot}\tau^{\parallel}\dagger$	$\frac{i\sqrt{2}}{k(\mathcal{M}_{Pl}{}^2)}$	$-\frac{24\alpha_1+6\alpha_3+\frac{2(\mathcal{M}_{Pl}{}^2)}{k^2}+3\theta^2\xi}{2(\mathcal{M}_{Pl}{}^2)^2}$	0	0
$\overset{0^+}{\cdot}\tau^{\perp}\dagger$	0	0	0	0
$\overset{0^-}{\cdot}\sigma^{\parallel}\dagger$	0	0	0	$\frac{2}{-8\beta_1+(\mathcal{M}_{Pl}{}^2)}$

	$\overset{0^+}{\cdot}\mathcal{A}^{\parallel}$	$\overset{0^+}{\cdot}f^{\parallel}$	$\overset{0^+}{\cdot}f^{\perp}$	$\overset{0^-}{\cdot}\mathcal{A}^{\parallel}$
$\overset{0^+}{\cdot}\mathcal{A}^{\parallel}\dagger$	$\frac{1}{4}(2(\mathcal{M}_{Pl}{}^2)+3k^2(8\alpha_1+2\alpha_3+\theta^2\xi))$	$-\frac{ik(\mathcal{M}_{Pl}{}^2)}{\sqrt{2}}$	0	0
$\overset{0^+}{\cdot}f^{\parallel}\dagger$	$\frac{ik(\mathcal{M}_{Pl}{}^2)}{\sqrt{2}}$	0	0	0
$\overset{0^+}{\cdot}f^{\perp}\dagger$	0	0	0	0
$\overset{0^-}{\cdot}\mathcal{A}^{\parallel}\dagger$	0	0	0	$\frac{1}{2}(-8\beta_1+(\mathcal{M}_{Pl}{}^2))$

Massive and massless spectra



Massive particle



Massless particle

Pole residue:	$(48(-512\beta_1{}^3(1+4\theta)^2(-32(\mathcal{M}_{Pl}{}^2)+(1+4\theta)^2\xi)+$ $8\beta_1(\mathcal{M}_{Pl}{}^2)^2(32(3+8\theta)(\mathcal{M}_{Pl}{}^2)-3(1+4\theta)^4\xi)+$ $64\beta_1{}^2(1+4\theta)(\mathcal{M}_{Pl}{}^2)(-32(3+4\theta)(\mathcal{M}_{Pl}{}^2)+(3+36\theta+128\theta^2+128\theta^3)\xi)+$ $(\mathcal{M}_{Pl}{}^2)^3(-32(\mathcal{M}_{Pl}{}^2)+(1+16\theta+112\theta^2+384\theta^3)\xi)))/$ $((-8\beta_1(1+4\theta)^2+(\mathcal{M}_{Pl}{}^2)+8\theta(\mathcal{M}_{Pl}{}^2))^2\xi$ $(8\beta_1(-48(\mathcal{M}_{Pl}{}^2)+(1+4\theta)^2\xi)+(\mathcal{M}_{Pl}{}^2)(48(\mathcal{M}_{Pl}{}^2)-(1+8\theta)\xi)))>0$
Square mass:	$-\frac{24(\mathcal{M}_{Pl}{}^2)(-8\beta_1+(\mathcal{M}_{Pl}{}^2))}{(-8\beta_1(1+4\theta)^2+(\mathcal{M}_{Pl}{}^2)+8\theta(\mathcal{M}_{Pl}{}^2))\xi}>0$
Spin:	1
Parity:	Odd

Poleresidue:	$\frac{1}{(\mathcal{M}_{Pl}{}^2)}>0$
Polarisations:	2

Unitarity conditions

$$(\mathcal{M}_{Pl}{}^2)>0\ \&\&\ \xi<0\ \&\&\ (\beta_1<0\ \&\&\ (\theta<\frac{-8\beta_1+(\mathcal{M}_{Pl}{}^2)}{32\beta_1}-\frac{1}{32}\sqrt{\frac{-8\beta_1(\mathcal{M}_{Pl}{}^2)+(\mathcal{M}_{Pl}{}^2)^2}{\beta_1{}^2}}\ \|\ \theta>\frac{-8\beta_1+(\mathcal{M}_{Pl}{}^2)}{32\beta_1}+\frac{1}{32}\sqrt{\frac{-8\beta_1(\mathcal{M}_{Pl}{}^2)+(\mathcal{M}_{Pl}{}^2)^2}{\beta_1{}^2}})\ \|$$

$$(\beta_1==0\ \&\&\ \theta>-\frac{1}{8})\ \|\ (0<\beta_1<\frac{(\mathcal{M}_{Pl}{}^2)}{8}\ \&\&\ \frac{-8\beta_1+(\mathcal{M}_{Pl}{}^2)}{32\beta_1}-\frac{1}{32}\sqrt{\frac{-8\beta_1(\mathcal{M}_{Pl}{}^2)+(\mathcal{M}_{Pl}{}^2)^2}{\beta_1{}^2}}<\theta<\frac{-8\beta_1+(\mathcal{M}_{Pl}{}^2)}{32\beta_1}+\frac{1}{32}\sqrt{\frac{-8\beta_1(\mathcal{M}_{Pl}{}^2)+(\mathcal{M}_{Pl}{}^2)^2}{\beta_1{}^2}})\ \|\ \beta_1>\frac{(\mathcal{M}_{Pl}{}^2)}{8}$$