PSALTer results panel

$$\mathcal{S} == \int\int\int\int (\frac{1}{6} (2 t_1 . \mathcal{A}^{\alpha\prime}{}_{\alpha} \mathcal{A}_{\prime}{}^{\theta}{}_{\theta} + 6 \mathcal{A}^{\alpha\beta\chi} \sigma_{\alpha\beta\chi} + 6 f^{\alpha\beta} \tau(\Delta+\mathcal{K})_{\alpha\beta} - 4 t_1 . \mathcal{A}_{\alpha}{}^{\theta}{}_{\theta} \partial_{\prime} f^{\alpha\prime} + 4 t_1 . \mathcal{A}_{\prime}{}^{\theta}{}_{\theta} \partial^{\prime} f^{\alpha}{}_{\alpha} -$$
$$2 t_1 . \partial_{\prime} f^{\theta}{}_{\theta} \partial^{\prime} f^{\alpha}{}_{\alpha} - 2 t_1 . \partial_{\prime} f^{\alpha\prime} \partial_{\theta} f_{\alpha}{}^{\theta} + 4 t_1 . \partial^{\prime} f^{\alpha}{}_{\alpha} \partial_{\theta} f_{\prime}{}^{\theta} + 8 r_2 . \partial_{\beta} \mathcal{A}_{\alpha\prime\theta} \partial^{\theta} \mathcal{A}^{\alpha\beta\prime} -$$
$$4 r_2 . \partial_{\beta} \mathcal{A}_{\alpha\theta\prime} \partial^{\theta} \mathcal{A}^{\alpha\beta\prime} + 4 r_2 . \partial_{\beta} \mathcal{A}_{\prime\theta\alpha} \partial^{\theta} \mathcal{A}^{\alpha\beta\prime} - 2 r_2 . \partial_{\prime} \mathcal{A}_{\alpha\beta\theta} \partial^{\theta} \mathcal{A}^{\alpha\beta\prime} + 2 r_2 . \partial_{\theta} \mathcal{A}_{\alpha\beta\prime} \partial^{\theta} \mathcal{A}^{\alpha\beta\prime} -$$
$$4 r_2 . \partial_{\theta} \mathcal{A}_{\alpha\prime\beta} \partial^{\theta} \mathcal{A}^{\alpha\beta\prime} - 6 t_1 . \partial_{\alpha} f_{\prime\theta} \partial^{\theta} f^{\alpha\prime} - 3 t_1 . \partial_{\alpha} f_{\theta\prime} \partial^{\theta} f^{\alpha\prime} + 3 t_1 . \partial_{\prime} f_{\alpha\theta} \partial^{\theta} f^{\alpha\prime} +$$
$$3 t_1 . \partial_{\theta} f_{\alpha\prime} \partial^{\theta} f^{\alpha\prime} + 3 t_1 . \partial_{\theta} f_{\prime\alpha} \partial^{\theta} f^{\alpha\prime} + 6 t_1 . \mathcal{A}_{\alpha\theta\prime} (\mathcal{A}^{\alpha\prime\theta} + 2 \partial^{\theta} f^{\alpha\prime})))[t, x, y, z] dt dz dy dx dt$$

Wave operator

	$0^+_{.}\mathcal{A}^{\parallel}$	$0^+_{.}f^{\parallel}$	$0^+_{.}f^{\perp}$	$0^-_{.}\mathcal{A}^{\parallel}$
$0^+_{.}\mathcal{A}^{\parallel}\dagger$	0	0	0	0
$0^+_{.}f^{\parallel}\dagger$	0	0	0	0
$0^+_{.}f^{\perp}\dagger$	0	0	0	0
$0^-_{.}\mathcal{A}^{\parallel}\dagger$	0	0	0	$k^2 r_2 . - t_1$

	$1^+_{.}\mathcal{A}^{\parallel}{}_{\alpha\beta}$	$1^+_{.}\mathcal{A}^{\perp}{}_{\alpha\beta}$	$1^+_{.}f^{\parallel}{}_{\alpha\beta}$	$1^-_{.}\mathcal{A}^{\parallel}{}_{\alpha}$	$1^-_{.}\mathcal{A}^{\perp}{}_{\alpha}$	$1^-_{.}f^{\parallel}{}_{\alpha}$	$1^-_{.}f^{\perp}{}_{\alpha}$
$1^+_{.}\mathcal{A}^{\parallel}\dagger^{\alpha\beta}$	$-\frac{t_1.}{2}$	$-\frac{t_1.}{\sqrt{2}}$	$-\frac{i k t_1.}{\sqrt{2}}$	0	0	0	0
$1^+_{.}\mathcal{A}^{\perp}\dagger^{\alpha\beta}$	$-\frac{t_1.}{\sqrt{2}}$	0	0	0	0	0	0
$1^+_{.}f^{\parallel}\dagger^{\alpha\beta}$	$\frac{i k t_1.}{\sqrt{2}}$	0	0	0	0	0	0
$1^-_{.}\mathcal{A}^{\parallel}\dagger^{\alpha}$	0	0	0	$\frac{t_1.}{6}$	$\frac{t_1.}{3\sqrt{2}}$	0	$\frac{i k t_1.}{3}$
$1^-_{.}\mathcal{A}^{\perp}\dagger^{\alpha}$	0	0	0	$\frac{t_1.}{3\sqrt{2}}$	$\frac{t_1.}{3}$	0	$\frac{1}{3} i \sqrt{2} k t_1.$
$1^-_{.}f^{\parallel}\dagger^{\alpha}$	0	0	0	0	0	0	0
$1^-_{.}f^{\perp}\dagger^{\alpha}$	0	0	0	$-\frac{1}{3} i k t_1.$	$-\frac{1}{3} i \sqrt{2} k t_1.$	0	$\frac{2 k^2 t_1.}{3}$

	$2^+_{.}\mathcal{A}^{\parallel}{}_{\alpha\beta}$	$2^+_{.}f^{\parallel}{}_{\alpha\beta}$	$2^-_{.}\mathcal{A}^{\parallel}{}_{\alpha\beta\chi}$
$2^+_{.}\mathcal{A}^{\parallel}\dagger^{\alpha\beta}$	$\frac{t_1.}{2}$	$-\frac{i k t_1.}{\sqrt{2}}$	0
$2^+_{.}f^{\parallel}\dagger^{\alpha\beta}$	$\frac{i k t_1.}{\sqrt{2}}$	$k^2 t_1.$	0
$2^-_{.}\mathcal{A}^{\parallel}\dagger^{\alpha\beta\chi}$	0	0	$\frac{t_1.}{2}$

Saturated propagator

	$0^+_{.}\sigma^{\parallel}$	$0^+_{.}\tau^{\parallel}$	$0^+_{.}\tau^{\perp}$	$0^-_{.}\sigma^{\parallel}$
$0^+_{.}\sigma^{\parallel}\dagger$	0	0	0	0
$0^+_{.}\tau^{\parallel}\dagger$	0	0	0	0
$0^+_{.}\tau^{\perp}\dagger$	0	0	0	0
$0^-_{.}\sigma^{\parallel}\dagger$	0	0	0	$\frac{1}{k^2 r_2 . - t_1.}$

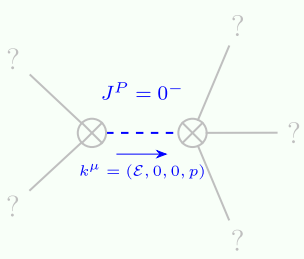
	$1^+_{.}\sigma^{\parallel}{}_{\alpha\beta}$	$1^+_{.}\sigma^{\perp}{}_{\alpha\beta}$	$1^+_{.}\tau^{\parallel}{}_{\alpha\beta}$	$1^-_{.}\sigma^{\parallel}{}_{\alpha}$	$1^-_{.}\sigma^{\perp}{}_{\alpha}$	$1^-_{.}\tau^{\parallel}{}_{\alpha}$	$1^-_{.}\tau^{\perp}{}_{\alpha}$
$1^+_{.}\sigma^{\parallel}\dagger^{\alpha\beta}$	0	$-\frac{\sqrt{2}}{t_1.+k^2 t_1.}$	$-\frac{i\sqrt{2}k}{t_1.+k^2 t_1.}$	0	0	0	0
$1^+_{.}\sigma^{\perp}\dagger^{\alpha\beta}$	$-\frac{\sqrt{2}}{t_1.+k^2 t_1.}$	$\frac{1}{(1+k^2)^2 t_1.}$	$\frac{i k}{(1+k^2)^2 t_1.}$	0	0	0	0
$1^+_{.}\tau^{\parallel}\dagger^{\alpha\beta}$	$\frac{i\sqrt{2}k}{t_1.+k^2 t_1.}$	$-\frac{i k}{(1+k^2)^2 t_1.}$	$\frac{k^2}{(1+k^2)^2 t_1.}$	0	0	0	0
$1^-_{.}\sigma^{\parallel}\dagger^{\alpha}$	0	0	0	$\frac{6}{(3+4k^2)^2 t_1.}$	$\frac{6\sqrt{2}}{(3+4k^2)^2 t_1.}$	0	$\frac{12 i k}{(3+4k^2)^2 t_1.}$
$1^-_{.}\sigma^{\perp}\dagger^{\alpha}$	0	0	0	$\frac{6\sqrt{2}}{(3+4k^2)^2 t_1.}$	$\frac{12}{(3+4k^2)^2 t_1.}$	0	$\frac{12 i\sqrt{2}k}{(3+4k^2)^2 t_1.}$
$1^-_{.}\tau^{\parallel}\dagger^{\alpha}$	0	0	0	0	0	0	0
$1^-_{.}\tau^{\perp}\dagger^{\alpha}$	0	0	0	$-\frac{12 i k}{(3+4k^2)^2 t_1.}$	$-\frac{12 i\sqrt{2}k}{(3+4k^2)^2 t_1.}$	0	$\frac{24 k^2}{(3+4k^2)^2 t_1.}$

	$2^+_{.}\sigma^{\parallel}{}_{\alpha\beta}$	$2^+_{.}\tau^{\parallel}{}_{\alpha\beta}$	$2^-_{.}\sigma^{\parallel}{}_{\alpha\beta\chi}$
$2^+_{.}\sigma^{\parallel}\dagger^{\alpha\beta}$	$\frac{2}{(1+2k^2)^2 t_1.}$	$-\frac{2 i\sqrt{2}k}{(1+2k^2)^2 t_1.}$	0
$2^+_{.}\tau^{\parallel}\dagger^{\alpha\beta}$	$\frac{2 i\sqrt{2}k}{(1+2k^2)^2 t_1.}$	$\frac{4k^2}{(1+2k^2)^2 t_1.}$	0
$2^-_{.}\sigma^{\parallel}\dagger^{\alpha\beta\chi}$	0	0	$\frac{2}{t_1.}$

Source constraints

Spin-parity form	Covariant form	Multiplicities
$0^+_{.}\tau^{\perp} == 0$	$\partial_{\beta}\partial_{\alpha}\tau(\Delta+\mathcal{K})^{\alpha\beta} == 0$	1
$0^+_{.}\tau^{\parallel} == 0$	$\partial_{\beta}\partial_{\alpha}\tau(\Delta+\mathcal{K})^{\alpha\beta} == \partial_{\beta}\partial^{\beta}\tau(\Delta+\mathcal{K})^{\alpha}{}_{\alpha}$	1
$0^+_{.}\sigma^{\parallel} == 0$	$\partial_{\beta}\sigma^{\alpha}{}_{\alpha}{}^{\beta} == 0$	1
$2 i k\ 1^-_{.}\sigma^{\parallel\alpha} + 1^-_{.}\tau^{\perp\alpha} == 0$	$\partial_{\chi}\partial_{\beta}\partial^{\alpha}\tau(\Delta+\mathcal{K})^{\beta\chi} + 2(\partial_{\delta}\partial^{\delta}\partial_{\chi}\partial^{\alpha}\sigma^{\beta}{}_{\beta}{}^{\chi} - \partial_{\delta}\partial^{\delta}\partial_{\chi}\partial_{\beta}\sigma^{\beta\alpha\chi} + \partial_{\delta}\partial^{\delta}\partial_{\chi}\partial^{\chi}\sigma^{\beta\alpha}{}_{\beta}) == \partial_{\chi}\partial^{\chi}\partial_{\beta}\tau(\Delta+\mathcal{K})^{\alpha\beta}$	3
$i k\ 1^+_{.}\sigma^{\perp\alpha\beta} + 1^+_{.}\tau^{\parallel\alpha\beta} == 0$	$\partial_{\chi}\partial^{\alpha}\tau(\Delta+\mathcal{K})^{\beta\chi} + \partial_{\chi}\partial^{\beta}\tau(\Delta+\mathcal{K})^{\chi\alpha} + \partial_{\chi}\partial^{\chi}\tau(\Delta+\mathcal{K})^{\alpha\beta} + 2\partial_{\delta}\partial_{\chi}\partial^{\alpha}\sigma^{\chi\beta\delta} + 2\partial_{\delta}\partial^{\delta}\partial_{\chi}\sigma^{\chi\alpha\beta} == \partial_{\chi}\partial^{\alpha}\tau(\Delta+\mathcal{K})^{\chi\beta} + \partial_{\chi}\partial^{\beta}\tau(\Delta+\mathcal{K})^{\alpha\chi} + \partial_{\chi}\partial^{\chi}\tau(\Delta+\mathcal{K})^{\beta\alpha} + 2\partial_{\delta}\partial_{\chi}\partial^{\beta}\sigma^{\chi\alpha\delta}$	3
$-2 i k\ 2^+_{.}\sigma^{\parallel\alpha\beta} + 2^+_{.}\tau^{\parallel\alpha\beta} == 0$	$-i(4\partial_{\delta}\partial_{\chi}\partial^{\beta}\partial^{\alpha}\tau(\Delta+\mathcal{K})^{\chi\delta} + 2\partial_{\delta}\partial^{\delta}\partial^{\beta}\partial^{\alpha}\tau(\Delta+\mathcal{K})^{\chi}{}_{\chi} - 3\partial_{\delta}\partial^{\delta}\partial_{\chi}\partial^{\alpha}\tau(\Delta+\mathcal{K})^{\beta\chi} - 3\partial_{\delta}\partial^{\delta}\partial_{\chi}\partial^{\beta}\tau(\Delta+\mathcal{K})^{\alpha\chi} - 3\partial_{\delta}\partial^{\delta}\partial_{\chi}\partial^{\chi}\tau(\Delta+\mathcal{K})^{\alpha\beta} + 3\partial_{\delta}\partial^{\delta}\partial_{\chi}\partial^{\chi}\tau(\Delta+\mathcal{K})^{\beta\alpha} + 4 i k^{\chi}\partial_{\epsilon}\partial_{\chi}\partial^{\beta}\partial^{\alpha}\sigma^{\delta}{}_{\delta}{}^{\epsilon} - 6 i k^{\chi}\partial_{\epsilon}\partial_{\delta}\partial_{\chi}\partial^{\beta}\sigma^{\delta\alpha\epsilon} - 6 i k^{\chi}\partial_{\epsilon}\partial^{\epsilon}\partial_{\delta}\partial_{\chi}\sigma^{\alpha\beta\delta} + 6 i k^{\chi}\partial_{\epsilon}\partial^{\epsilon}\partial_{\delta}\partial_{\chi}\sigma^{\beta\alpha\delta} + 2\eta^{\alpha\beta}\partial_{\epsilon}\partial^{\epsilon}\partial_{\delta}\partial_{\chi}\tau(\Delta+\mathcal{K})^{\chi\delta} - 2\eta^{\alpha\beta}\partial_{\epsilon}\partial^{\epsilon}\partial_{\delta}\partial^{\delta}\tau(\Delta+\mathcal{K})^{\chi}{}_{\chi} - 4 i \eta^{\alpha\beta}k^{\chi}\partial_{\phi}\partial^{\phi}\partial_{\epsilon}\partial_{\chi}\sigma^{\delta}{}_{\delta}{}^{\epsilon}) == 0$	5
Total expected gauge generators:		20

Massive spectrum



Massive particle

Pole residue:	$-\frac{1}{r_2.} > 0$
Square mass:	$\frac{t_1.}{r_2.} > 0$
Spin:	0
Parity:	Odd

Massless spectrum

(No particles)

Unitarity conditions

$r_2. < 0 \&\& t_1. < 0$