PSALTer results panel

$$\mathcal{S} == \iiiint \big(\mathcal{A}^{\alpha\beta\chi}\ \sigma_{\alpha\beta\chi} + f^{\alpha\beta}\ \tau(\Delta+\mathcal{K})_{\alpha\beta} + t_1 \big(\mathcal{A}_{\iota\zeta\theta}\ \mathcal{A}^{\iota\theta\zeta} + \mathcal{A}^{\iota\theta}{}_{\iota}\ \mathcal{A}_{\theta}{}^{\zeta}{}_{\zeta} + 2\ f^{\iota\theta}\ \partial_{\theta}\mathcal{A}_{\iota}{}^{\zeta}{}_{\zeta} - 2\,\partial_{\theta}\mathcal{A}^{\iota\theta}{}_{\iota} - 2\ f^{\iota\theta}\ \partial_{\zeta}\mathcal{A}_{\iota}{}^{\zeta}{}_{\theta} + 2\ f^{\iota}{}_{\iota}\ \partial_{\zeta}\mathcal{A}^{\theta\zeta}{}_{\theta} \big)\big)[t,x,y,z]\, dz\, dy\, dx\, dt$$

Wave operator

	$0^{+}\mathcal{A}^{\parallel}$	$0^{+}f^{\parallel}$	$0^{+}f^{\perp}$	$0^{-}\mathcal{A}^{\parallel}$
$0^{+}\mathcal{A}^{\parallel}\dagger$	$-t_1$	$i\sqrt{2}\,k\,t_1$	0	0
$0^{+}f^{\parallel}\dagger$	$-i\sqrt{2}\,k\,t_1$	0	0	0
$0^{+}f^{\perp}\dagger$	0	0	0	0
$0^{-}\mathcal{A}^{\parallel}\dagger$	0	0	0	$-t_1$

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

	$2^{+}\mathcal{A}^{\parallel}{}_{\alpha\beta}$	$2^{+}f^{\parallel}{}_{\alpha\beta}$	$2^{-}\mathcal{A}^{\parallel}{}_{\alpha\beta\chi}$
$2^{+}\mathcal{A}^{\parallel}\dagger^{\alpha\beta}$	$\frac{t_1}{2}$	$-\frac{i\,k\,t_1}{\sqrt{2}}$	0
$2^{+}f^{\parallel}\dagger^{\alpha\beta}$	$\frac{i\,k\,t_1}{\sqrt{2}}$	0	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	$\frac{i}{\sqrt{2}\,k\,t_1}$	0	0
$0^{+}\tau^{\parallel}\dagger$	$-\frac{i}{\sqrt{2}\,k\,t_1}$	$\frac{1}{2\,k^2\,t_1}$	0	0
$0^{+}\tau^{\perp}\dagger$	0	0	0	0
$0^{-}\sigma^{\parallel}\dagger$	0	0	0	$-\frac{1}{t_1}$

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

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

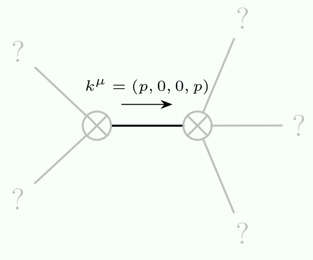
Source constraints

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

Massive spectrum

(No particles)

Massless spectrum



Massless particle

Pole residue:	$-\frac{p^2}{t_1} > 0$
Polarisations:	2

Unitarity conditions

$t_1 < 0$