PSALTer results panel

$$S = \iiiint \Big(\mathcal{A}^{\alpha\beta\chi} \ \sigma_{\alpha\beta\chi} + f^{\alpha\beta} \ \tau\,(\Delta+\mathcal{K})_{\alpha\beta} + \beta_1 \Big(4\,\partial_\beta\mathcal{A}^{\alpha\beta}{}_\alpha - 4\,\mathcal{A}_\alpha{}^X{}_X\,\partial_\beta f^{\alpha\beta} + 4\,\mathcal{A}_\beta{}^X{}_X\,\partial^\beta f^\alpha{}_\alpha -$$
$$2\,\partial_\beta f^X{}_X\,\partial^\beta f^\alpha{}_\alpha - 4\,f^{\alpha\beta}\left(\partial_\beta\mathcal{A}_\alpha{}^X{}_X - \partial_X\mathcal{A}_\alpha{}^X{}_\beta\right) - 4\,f^\alpha{}_\alpha\,\partial_X\mathcal{A}^{\beta X}{}_\beta - 2\,\partial_\beta f^{\alpha\beta}\,\partial_X f_\alpha{}^X + 4\,\partial^\beta f^\alpha{}_\alpha\,\partial_X f{}_\beta{}^X +$$
$$4\,\mathcal{A}_{\alpha X\beta}\,\partial^X f^{\alpha\beta} - 2\,\partial_\alpha f{}_{\beta X}\,\partial^X f^{\alpha\beta} - \partial_\alpha f_{X\beta}\,\partial^X f^{\alpha\beta} + \partial_\beta f_{\alpha X}\,\partial^X f^{\alpha\beta} + \partial_X f_{\alpha\beta}\,\partial^X f^{\alpha\beta} + \partial_X f_{\beta\alpha}\,\partial^X f^{\alpha\beta}\Big) +$$
$$\tfrac{1}{3}\,\alpha_3\Big(4\,\partial_\beta\mathcal{A}_{\alpha X\delta} - 2\,\partial_\beta\mathcal{A}_{\alpha\delta X} + 2\,\partial_\beta\mathcal{A}_{X\delta\alpha} - \partial_X\mathcal{A}_{\alpha\beta\delta} + \partial_\delta\mathcal{A}_{\alpha\beta X} - 2\,\partial_\delta\mathcal{A}_{\alpha X\beta}\Big)\partial^\delta\mathcal{A}^{\alpha\beta X}\Big)[t,\,x,\,y,\,z]\,dz\,dy\,dx\,dt$$

Wave operator

Saturated propagator

Source constraints

Spin-parity form	Covariant form	Multiplicities
$\overset{0^+}{\cdot}\tau^\perp == 0$	$\partial_\beta\partial_\alpha\,\tau\,(\Delta+\mathcal{K})^{\alpha\beta} == 0$	1
$\overset{0^-}{\cdot}\sigma^\parallel == 0$	$\partial_\beta\sigma^\alpha{}_\alpha{}^\beta == 0$	1
$\overset{1^-}{\cdot}\tau^\perp{}_\alpha == 0$	$\partial_X\partial_\beta\partial^\alpha\tau\,(\Delta+\mathcal{K})^{\beta X} == \partial_X\partial^X\partial_\beta\tau\,(\Delta+\mathcal{K})^{\alpha\beta}$	3
$\overset{1^-}{\cdot}f^\parallel{}_\alpha == 0$	$\partial_X\partial_\beta\partial^\alpha\tau\,(\Delta+\mathcal{K})^{\beta X} == \partial_X\partial^X\partial_\beta\tau\,(\Delta+\mathcal{K})^{\beta\alpha}$	3
$\overset{1^-}{\cdot}\sigma^\perp{}_\alpha == 0$	$\partial_X\partial_\beta\sigma^{\beta\alpha X} == 0$	3
$\overset{1^+}{\cdot}\sigma^\parallel{}_\alpha == 0$	$\partial_\delta\partial^\alpha\sigma^X{}_X{}^\delta + \partial_\delta\partial^\delta\sigma^{X\alpha}{}_X == \partial_\delta\partial_X\sigma^{X\alpha\delta}$	3
$\overset{1^+}{\cdot}f^\parallel{}_\alpha == 0$	$\partial_X\partial^\alpha\tau\,(\Delta+\mathcal{K})^{\beta X} + \partial_X\partial^\beta\tau\,(\Delta+\mathcal{K})^{X\alpha} + \partial_X\partial^X\tau\,(\Delta+\mathcal{K})^{\alpha\beta} ==$	3
	$\partial_X\partial^\alpha\tau\,(\Delta+\mathcal{K})^{X\beta} + \partial_X\partial^\beta\tau\,(\Delta+\mathcal{K})^{\alpha X} + \partial_X\partial^X\tau\,(\Delta+\mathcal{K})^{\beta\alpha}$	
$\overset{1^+}{\cdot}\sigma^\perp{}^{\alpha\beta} == 0$	$\partial_\delta\partial_X\sigma^{\alpha}{}_X{}^{X\beta\delta} + \partial_\delta\partial_X\sigma^{X\alpha\beta} == \partial_\delta\partial_X\sigma^{X\alpha\delta}$	3
$\overset{1^+}{\cdot}\sigma^\parallel{}^{\alpha\beta} == 0$	$\partial_\delta\partial_X\sigma^{\alpha X\beta\delta} + \partial_\delta\partial_X\sigma^{X\alpha\beta\delta} == \partial_\delta\partial_X\partial^\beta\sigma^{X\alpha\delta} + \partial_\delta\partial^\delta\partial_X\sigma^{\alpha\beta X}$	3
$\overset{2^-}{\cdot}\sigma^\parallel{}^{\alpha\beta\chi} == 0$	$3\,\partial_\epsilon\partial_\delta\partial_X\sigma^{\alpha}{}_X\sigma^{\delta\beta\epsilon} + 3\,\partial_\delta\partial^\epsilon\partial_X\sigma^{\alpha\delta\beta}{}_\delta + 2\,\partial_\epsilon\partial_\delta\partial^\beta\sigma^{\alpha X\delta} + 4\,\partial_\epsilon\partial^\epsilon\partial_\delta\partial^\beta\sigma^{X\alpha\delta} +$	5
	$2\,\partial_\epsilon\partial^\epsilon\partial_\delta\partial_X\sigma^{\delta\alpha X} + 2\,\partial_\epsilon\partial^\epsilon\partial_\delta\partial_X\sigma^{\beta\alpha\delta} + 4\,\partial_\epsilon\partial^\epsilon\partial_\delta\partial_X\sigma^{\delta\alpha\beta} + 2\,\partial_\epsilon\partial_\delta\partial^\delta\sigma^{\alpha\beta X} +$	
	$3\,\eta^{\beta X}\,\partial_\phi\partial^\phi\partial_\epsilon\partial_\delta\sigma^{\delta}{}_X{}^\epsilon + 3\,\eta^{\alpha X}\,\partial_\phi\partial^\phi\partial_\epsilon\partial_\delta\sigma^{\delta\beta\epsilon} + 3\,\eta^{\beta X}\,\partial_\phi\partial^\phi\partial_\epsilon\partial^\epsilon\sigma^{\delta\alpha}{}_\delta ==$	
	$3\,\partial_\epsilon\partial_\delta\partial^X\partial_X\sigma^{\delta\alpha\epsilon} + 3\,\partial_\epsilon\partial^\epsilon\partial_X\partial_X\sigma^{\delta\alpha}{}_\delta + 2\,\partial_\epsilon\partial_\delta\partial^\alpha\sigma^{\beta X\delta} + 4\,\partial_\epsilon\partial^\epsilon\partial_\delta\sigma^{X\beta\delta} +$	
	$2\,\partial_\epsilon\partial^\epsilon\partial_\delta\partial_X\sigma^{\delta\beta\chi} + 2\,\partial_\epsilon\partial^\epsilon\partial_\delta\partial_X\sigma^{\alpha\beta\chi} + 2\,\partial_\epsilon\partial^\epsilon\partial_\delta\partial_X\sigma^{\beta\alpha X} + 4\,\partial_\epsilon\partial^\epsilon\partial_\delta\partial_X\sigma^{\chi\alpha\beta} +$	
	$3\,\eta^{\alpha X}\,\partial_\phi\partial^\phi\partial_\epsilon\partial_\delta\sigma^\delta{}_X{}^\epsilon + 3\,\eta^{\beta X}\,\partial_\phi\partial^\phi\partial_\epsilon\partial_\delta\sigma^{\delta\alpha\epsilon} + 3\,\eta^{\alpha X}\,\partial_\phi\partial^\phi\partial_\epsilon\partial^\epsilon\sigma^{\delta\beta}{}_\delta$	
$\overset{2^-}{\cdot}\sigma^\parallel{}^{\alpha\beta} == 0$	$3\,\partial_\delta\partial_X\partial_X\sigma^{\alpha\beta\chi} + 3\,\partial_\delta\partial_X\partial^\alpha\sigma^{X\alpha\delta} + 2\,\eta^{\alpha\beta}\,\partial_\delta\partial^\delta\partial_X\sigma^X{}_X{}^\delta ==$	5
	$2\,\partial_\delta\partial^\beta\partial_X\sigma^X{}_X{}^\delta + 3\left(\partial_\delta\partial^\delta\partial_X\sigma^{\alpha\beta\chi} + \partial_\delta\partial_\delta\partial_X\sigma^{\beta\alpha\chi}\right)$	
Total expected gauge generators:		33

Massive spectrum

(There are no massive particles)

Massless spectrum

$k^\mu = (p, 0, 0, p)$

Massless particle

Pole residue:	$\dfrac{p^2}{\beta_1} > 0$
Polarisations:	2

Gauge symmetries

(Not yet implemented in PSALTer)

Unitarity conditions

$\beta_1 > 0$

Validity assumptions

(Not yet implemented in PSALTer)