PSALTer results panel $S = \iiint (\frac{1}{4} (2a_{0} \mathcal{A}_{\alpha}^{\alpha\beta} \mathcal{A}_{\beta\chi}^{\chi} + \mathcal{A}_{\beta\chi}^{\alpha\beta\chi} (-2a_{0} \mathcal{A}_{\beta\chi\alpha} + 4 \mathcal{W}_{\alpha\beta\chi}) + 4 \mathcal{T}^{\alpha\beta} h_{\alpha\beta} - a_{0} h_{\chi}^{\chi} \partial_{\beta} \mathcal{A}_{\alpha}^{\beta} + a_{0} h_{\chi}^{\chi} \partial_{\beta} \mathcal{A}_{\alpha}^{\alpha\beta} - 2a_{0} h_{\alpha\chi} \partial_{\beta} \mathcal{A}^{\alpha\beta\chi} + 2a_{0} h_{\beta\chi} \partial^{\chi} \mathcal{A}_{\alpha}^{\beta}))[t, x, y, z] dz dy dx dt$ **Wave operator** $\overset{0^{+}}{\cdot} h^{\scriptscriptstyle \perp} \quad \overset{0^{+}}{\cdot} h^{\scriptscriptstyle \parallel} \quad \overset{0^{+}}{\cdot} \mathcal{A}_{a}^{\scriptscriptstyle \parallel} \quad \overset{0^{+}}{\cdot} \mathcal{A}_{s}^{\, \scriptscriptstyle \perp t} \quad \overset{0^{+}}{\cdot} \mathcal{A}_{s}^{\scriptscriptstyle \parallel} \quad \overset{0^{+}}{\cdot} \mathcal{A}_{s}^{\, \scriptscriptstyle \perp h} \quad \quad \overset{0^{-}}{\cdot} \mathcal{A}_{a}^{\scriptscriptstyle \parallel}$ $0.7h^{\parallel} + 0 \qquad 0 \qquad \frac{i \, a.k}{2 \, \sqrt{2}} \qquad 0 \qquad -\frac{i \, a.k}{4 \, \sqrt{3}} \qquad \frac{i \, a.k}{4 \, \sqrt{6}}$ $0^+ \mathcal{A}_a^{\parallel} + 0 - \frac{i \, a \, k}{2 \, \sqrt{2}} - \frac{a \, 0}{2} \qquad 0 \qquad 0$ $^{1.}\mathcal{A}_{\mathsf{a}}^{\parallel}\dagger^{\alpha\beta}$ $^{1^+}\mathcal{A}_{\mathsf{a}}{}^{\scriptscriptstyle \perp}\,\dagger^{^{lphaeta}}$ $^{1.}^{+}\mathcal{A}_{\mathsf{S}}{}^{\scriptscriptstyle \perp}\,\dagger^{lphaeta}$ $\frac{1}{2}h^{\perp} + \alpha$ $-\frac{i a. k}{0.0} \qquad -\frac{a.}{4} \qquad \frac{a.}{2\sqrt{2}} \qquad 0$ ${}^{1}\mathcal{A}_{\mathsf{a}}{}^{\parallel}\,\dagger^{\alpha}$ ${}^{1}\mathcal{A}_{\mathsf{a}}{}^{\perp}\,\dagger^{\alpha}$ ${}^{1}\mathcal{A}_{s}^{\perp t}\dagger^{\alpha}$ $^{1}\mathcal{A}_{\mathsf{S}}^{\mathsf{\parallel t}}\,\mathsf{\dagger}^{\alpha}$ ${}^{1}\mathcal{A}_{s}^{\perp h} + {}^{\alpha}$ ${}^{1}\mathcal{A}_{s}^{\parallel h} \dagger^{\alpha}$ $^{2}\mathcal{A}_{a}^{\parallel}\dagger^{\alpha\beta\chi}$ ${}^{3}\mathcal{A}_{s}{}^{\parallel}{}_{\alpha\beta\chi}$ $3^{-}\mathcal{A}_{s}^{\parallel} \uparrow^{\alpha\beta\chi}$ Saturated propagator

	${}^{0,^+}\mathcal{T}^{\scriptscriptstyle \perp}$	0 . \mathcal{T}^{\parallel}	0 \mathcal{W}_{a}	$0.W_{s}^{-1}$	${}^{0,{}^{ au}}\mathcal{W}_{S}{}^{\parallel}$	$0.W_{s}^{1n}$	${}^{0}\mathcal{W}_{a}{}^{\parallel}$	
$\overset{0^+}{\cdot}\mathcal{T}^{\scriptscriptstyle \perp}$ †	$-\frac{36 k^2}{a_0 (16+3 k^2)^2}$	$\frac{4 \sqrt{3}}{16 a_0 + 3 a_0 k^2}$	$\frac{2 i \sqrt{6} k}{16 a + 3 a k^{2}}$	$-\frac{72 i k}{a \cdot (16 + 3 k^2)^2}$	$\frac{8 i k (19+3 k^2)}{a \cdot (16+3 k^2)^2}$	$-\frac{4 i \sqrt{2} k (10+3 k^2)}{a_0 (16+3 k^2)^2}$	0	
^{0,+} ∕T †	$\frac{4 \sqrt{3}}{16 a_0 + 3 a_0 k^2}$	$\frac{4}{a \cdot k^2}$	$\frac{2 i \sqrt{2}}{a \cdot k}$	$\frac{8 i \sqrt{3}}{16 a. k+3 a. k^3}$	$-\frac{8i}{\sqrt{3} (16a.k+3a.k^3)}$	$-\frac{8i\sqrt{\frac{2}{3}}}{16a.k+3a.k^{3}}$	0	
^{0,+} Wa †	$-\frac{2i\sqrt{6}k}{16a.+3a.k^{2}}$	$-\frac{2i\sqrt{2}}{a.k\atop 0}$	0	$\frac{4 \sqrt{6}}{16 a. +3 a. k^2}$	0 0	$-\frac{8}{\sqrt{3}(16a.+3a.k^2)}$	0	
${}^{0^{+}}W_{s}^{\perp t}$ †	$\frac{72 i k}{a \cdot (16 + 3 k^2)^2}$	$-\frac{8i \sqrt{3}}{16a.k+3a.k^{3}}$	$\frac{4 \sqrt{6}}{16 a_0 + 3 a_0 k^2}$	$-\frac{144}{a_{.0}(16+3k^2)^2}$	$\frac{16(19+3k^2)}{a \cdot (16+3k^2)^2}$	$-\frac{8\sqrt{2}(10+3k^2)}{a_0(16+3k^2)^2}$	0	
^{0,+} W _s †	$-\frac{8 i k (19+3 k^2)}{a \cdot (16+3 k^2)^2}$	$\frac{8i}{\sqrt{3} (16a.k+3a.k^3)}$	$-\frac{4\sqrt{\frac{2}{3}}}{16a.+3a.k^{2}}$	$\frac{16(19+3k^2)}{a\cdot (16+3k^2)^2}$	$-\frac{16(35+6k^2)}{3a.(16+3k^2)^2}$	$-\frac{8\sqrt{2}(22+3k^2)}{3a.(16+3k^2)^2}$	0	
^{0,+} W _s ^{±h} †	$\frac{4 i \sqrt{2} k (10+3 k^2)}{a \cdot (16+3 k^2)^2}$	$\frac{8 i \sqrt{\frac{2}{3}}}{16 a_0 k + 3 a_0 k^3}$	$-\frac{8}{\sqrt{3} (16 a. + 3 a. k^2)}$	$-\frac{8\sqrt{2}(10+3k^2)}{a\cdot(16+3k^2)^2}$	$-\frac{8\sqrt{2}(22+3k^2)}{3a.(16+3k^2)^2}$	$\frac{32(13+3k^2)}{3a.(16+3k^2)^2}$	0	
^{0.} "Wa [∥] †	0	0	0	0	0	0	$-\frac{2}{a}$	1

a. 0	$^{1^+}W_a^{\parallel}_{\alpha\beta}$	$1.^+W_{a^\perp\alpha\beta}$	$1^+_{\cdot}W_{S^{\perp}\alpha\beta}$	$^{1}\mathcal{T}_{\alpha}^{\scriptscriptstyle{\perp}}$	${}^{1}\mathcal{W}_{a}{}^{\parallel}{}_{\alpha}$	${}^{1}\mathcal{W}_{a^{\perp}\alpha}$	${}^{1}W_{s}^{\perp t}_{\alpha}$	${}^{1}\mathcal{W}_{s}{}^{\parallelt}{}_{\alpha}$	${}^{1}W_{s}^{\perp h}{}_{\alpha}$	${}^{1}\mathcal{W}_{s}^{lh}{}_{\alpha}$	
$^{1^+}\mathcal{W}_{a}{}^{\parallel}\dagger^{\alpha\beta}$	0	$-\frac{2\sqrt{2}}{a_0}$	0	0	0	0	0	0	0	0	
$^{1^+}\mathcal{W}_{a}{^{\scriptscriptstyle\perp}}\dagger^{^{\alpha\beta}}$	$-\frac{2\sqrt{2}}{a}$	$\frac{2}{a}$	0	0	0	0	0	0	0	0	
$1^+W_S^{\perp}\dagger^{\alpha\beta}$		0	$\frac{4}{a}$	0	0	0	0	0	0	0	
$\frac{1}{2}\mathcal{T}^{\perp}\dagger^{\alpha}$	0	0	0	$\frac{2 k^2}{a_0 (2+k^2)^2}$	$\frac{2i\sqrt{2}k}{a\cdot(2+k^2)}$	$\frac{i k (4+k^2)}{a \cdot (2+k^2)^2}$	$-\frac{i k (6+5 k^2)}{\sqrt{6} a_0 (2+k^2)^2}$	$\frac{i \sqrt{\frac{5}{6}} k}{a \cdot (2+k^2)}$	$-\frac{2ik(3+k^2)}{\sqrt{3}a_{.0}(2+k^2)^2}$	$\frac{i\sqrt{\frac{2}{3}}k}{a\cdot(2+k^2)}$	
¹⁻Wa [∥] † ^α	0	0	0	$-\frac{2i\sqrt{2}k}{a(2+k^2)}$	0	$\frac{\sqrt{2} (4+k^2)}{a_0(2+k^2)}$	$-\frac{2 k^2}{\sqrt{3} a_{.0} (2+k^2)}$	0	$\frac{\sqrt{\frac{2}{3}} k^2}{a_0(2+k^2)}$	0	
$\frac{1}{2}W_{a}^{\perp}+^{\alpha}$	0	0	0	$-\frac{i k (4+k^2)}{a \cdot (2+k^2)^2}$	$\frac{\sqrt{2} (4+k^2)}{a_0(2+k^2)}$	$\frac{(4+k^2)^2}{2a_0(2+k^2)^2}$	$\frac{k^2 \left(-2+k^2\right)}{2 \sqrt{6} a \cdot (2+k^2)^2}$	$-\frac{\sqrt{\frac{5}{6}} k^2}{4 a. +2 a. k^2}$	$\frac{k^2 (5+2 k^2)}{\sqrt{3} a_0 (2+k^2)^2}$	$-\frac{k^2}{\sqrt{6} \ a_{.0}(2+k^2)}$	
1-W _s ^{1t} †α	0	0	0	$\frac{i k (6+5 k^2)}{\sqrt{6} a_0 (2+k^2)^2}$	$-\frac{2 k^2}{\sqrt{3} a_0 (2+k^2)}$	$\frac{k^2 \left(-2+k^2\right)}{2 \sqrt{6} a_0 \left(2+k^2\right)^2}$	$-\frac{76+52 k^2+3 k^4}{12 a \cdot (2+k^2)^2}$	$\frac{\sqrt{5} (10+3 k^2)}{12 a_0 (2+k^2)}$	$\frac{-2+k^2}{3\sqrt{2}a_0(2+k^2)^2}$	$\frac{1}{-2 a\frac{8 a.}{0.2+3 k^2}}$	
$\frac{1}{2} \mathcal{W}_{S}^{It} t^{\alpha}$	0	0	0	$-\frac{i\sqrt{\frac{5}{6}}k}{a\cdot(2+k^2)}$	0	$-\frac{\sqrt{\frac{5}{6}} k^2}{4 a_0 + 2 a_0 k^2}$	$\frac{\sqrt{5} (10+3 k^2)}{12 a_0 (2+k^2)}$	$\frac{1}{12a}$	$-\frac{\sqrt{\frac{5}{2}}}{6 a. +3 a. k^{2}}$	$-\frac{\sqrt{5}}{6a}_{0}$	
$\frac{1}{2}W_{s}^{\perp h} \uparrow^{\alpha}$	0	0		$\frac{2ik(3+k^2)}{\sqrt{3}a_0(2+k^2)^2}$	$\frac{\sqrt{\frac{2}{3}} k^2}{a_{.0}(2+k^2)}$	$\frac{k^2 (5+2 k^2)}{\sqrt{3} a_0 (2+k^2)^2}$	$\frac{-2+k^2}{3\sqrt{2}a_0(2+k^2)^2}$	$-\frac{\sqrt{\frac{5}{2}}}{6a.+3a.k^2}$	$\frac{2(17+14k^2+3k^4)}{3a.(2+k^2)^2}$	$-\frac{\sqrt{2} (7+3 k^2)}{3 a_0 (2+k^2)}$	
¹: W _s ∥h † ^α	0	0	0	$-\frac{i\sqrt{\frac{2}{3}}k}{2a.+a.k^{2}}$	0	$-\frac{k^2}{\sqrt{6} \ a_0(2+k^2)}$	$\frac{1}{-2 a\frac{8 a.}{0} -\frac{8 a.}{2+3 k^2}}$	$-\frac{\sqrt{5}}{6a_0}$	$-\frac{\sqrt{2} (7+3 k^2)}{3 a_0 (2+k^2)}$	5 3 a.	2

5 3 a.	2+~1	2+au	2+au	2+au +	2 ⁻ au	2°au
					- w _{a"αβχ}	$2^{-}W_{s}^{\parallel}_{\alpha\beta\chi}$
$^{2^{+}}\mathcal{T}^{\parallel}\dagger^{lphaeta}$	$-\frac{8}{a_0 k^2}$	$-\frac{4i\sqrt{2}}{a.k\atop 0}$	$\frac{4i}{\sqrt{3} a.k}$	$\frac{4i\sqrt{\frac{2}{3}}}{a.k\atop 0}$	0	0
$^{2^{+}}\mathcal{W}_{a}{}^{\parallel}\dagger^{^{lphaeta}}$	$\frac{4i \sqrt{2}}{a.k\atop 0}$	0	$\frac{2\sqrt{\frac{2}{3}}}{a_{0}}$	$\frac{4}{\sqrt{3}}a_{0}$	0	0
$^{2^{+}}W_{s}^{\parallel}\dagger^{\alpha\beta}$	$-\frac{4i}{\sqrt{3}} a_{0k}^{k}$	$\frac{2\sqrt{\frac{2}{3}}}{a_{0}}$	$-\frac{8}{3a}$	$-\frac{2\sqrt{2}}{3a.0}$	0	0
$2^{+}W_{a}^{\parallel} + \alpha^{\beta}$ $2^{+}W_{s}^{\parallel} + \alpha^{\beta}$ $2^{+}W_{s}^{\perp} + \alpha^{\beta}$	$-\frac{4i\sqrt{\frac{2}{3}}}{a.k\atop 0}$	$\frac{4}{\sqrt{3}}a_{0}$	$-\frac{2\sqrt{2}}{3a}$	8 3 a.	0	0
$2^{-}W_{a}^{\parallel} + \alpha \beta \chi$		0	0	0	$\frac{4}{a}$	0
$2^{-}W_{s}^{\parallel} + \alpha^{\alpha\beta\chi}$	0	0	0	0	0	$\frac{4}{a}$
						$3^{-}W_{s}^{\parallel} + \alpha \beta \lambda$

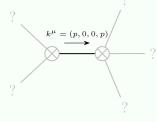
Source constraints

Spin-parity form	Covariant form	Multiplicities
$k^{0+}W_{s}^{\parallel} + 2k^{0+}W_{s}^{\perp h} - 6i^{0+}T^{\perp} = 0$	$2\partial_{\beta}\partial_{\alpha}\mathcal{T}^{\alpha\beta} + \partial_{\chi}\partial^{\chi}\partial_{\alpha}\mathcal{W}^{\alpha\beta}_{ \beta} = \partial_{\chi}\partial_{\beta}\partial_{\alpha}\mathcal{W}^{\alpha\beta\chi}$	1
$k^{0+}W_{s}^{\perp t} + 2i^{0+}T^{\perp} == 0$	$2\partial_{\beta}\partial_{\alpha}\mathcal{T}^{\alpha\beta} = \partial_{\chi}\partial_{\beta}\partial_{\alpha}\mathcal{W}^{\alpha\beta\chi}$	1
$\frac{6k {}^{1} \mathcal{W}_{a}^{\perp \alpha} + 2k {}^{1} \mathcal{W}_{s}^{\parallel h^{\alpha}} + k {}^{1} \mathcal{W}_{s}^{\parallel t^{\alpha}} + 3k {}^{1} \mathcal{W}_{s}^{\perp t^{\alpha}} + 12i {}^{1} \mathcal{T}^{\perp \alpha} = 0}$	$4 \partial_{\chi} \partial_{\beta} \partial^{\alpha} \mathcal{T}^{\beta \chi} + 2 \partial_{\delta} \partial^{\delta} \partial_{\chi} \partial_{\beta} \mathcal{W}^{\beta \alpha \chi} + \partial_{\delta} \partial^{\delta} \partial_{\chi} \partial^{\chi} \mathcal{W}^{\alpha \beta}_{\beta} = 4 \partial_{\chi} \partial^{\chi} \partial_{\beta} \mathcal{T}^{\alpha \beta} + 2 \partial_{\delta} \partial_{\chi} \partial_{\beta} \partial^{\alpha} \mathcal{W}^{\beta \chi \delta} + \partial_{\delta} \partial^{\delta} \partial_{\beta} \partial^{\alpha} \mathcal{W}^{\beta \chi}_{\chi}$	3
$k {}^{1}\mathcal{W}_{s}^{\perp h^{\alpha}} - 6i {}^{1}\mathcal{T}^{\perp \alpha} = k (3 {}^{1}\mathcal{W}_{a}^{\perp \alpha} + {}^{1}\mathcal{W}_{s}^{\perp t^{\alpha}})$	$2 \partial_{\chi} \partial_{\beta} \partial^{\alpha} \mathcal{T}^{\beta \chi} + \partial_{\delta} \partial^{\delta} \partial_{\chi} \partial_{\beta} \mathcal{W}^{\beta \alpha \chi} = 2 \partial_{\chi} \partial^{\chi} \partial_{\beta} \mathcal{T}^{\alpha \beta} + \partial_{\delta} \partial_{\chi} \partial_{\beta} \partial^{\alpha} \mathcal{W}^{\beta \chi \delta}$	3
Total expected gauge generators:		8

Massive spectrum

(No particles)

Massless spectrum



Massless particle

Pole residue: $\left| -\frac{p^2}{a} \right| > 0$ Polarisations: 2

Unitarity conditions