PSALTer results panel

Wave operator and propagator

$$S == \iiiint \Big(\tfrac{1}{8}\big(8\,\mathcal{T}^{\alpha\beta}\,h_{\alpha\beta} - 2\,a_0\,h^{\chi}{}_{\chi}\,\partial_\beta\mathcal{A}^{\alpha\beta}{}_{\alpha} + 2\,a_0\,h^{\chi}{}_{\chi}\,\partial_\beta\mathcal{A}^{\alpha\beta}{}_{\alpha} - 4\,a_0\,h_{\alpha\chi}\,\partial_\beta\mathcal{A}^{\alpha\beta\chi} + 44\,c_1\,\partial^\alpha\mathcal{A}^{\chi\delta}{}_{\delta}\,\partial_\beta\mathcal{A}_{\chi\alpha}{}^{\beta} + 4\,c_1\,\partial^\alpha\mathcal{A}_{\chi\alpha}{}^{\beta}\,\partial_\delta\mathcal{A}^{\chi\delta}{}_{\beta} - 152\,c_1\,\partial^\alpha\mathcal{A}^{\chi\delta}{}_{\alpha}\,\partial_\beta\mathcal{A}_{\delta\chi}{}^{\beta} - 4$$
$$\mathcal{A}^{\alpha\beta\chi}\,(a_0\,\mathcal{A}_{\beta\chi\alpha} - 2\,\mathcal{W}_{\alpha\beta\chi} + a_0\,\partial_\chi h_{\beta\alpha}) + 2\,a_0\,\mathcal{A}^{\alpha\beta}{}_{\alpha}\,\partial_\beta h^{\chi}{}_{\chi} + 2\,a_0\,h^{\alpha\beta}\,\partial_\beta\partial_\alpha h^{\chi}{}_{\chi} - a_0\,\partial_\beta h^{\chi}{}_{\chi}\,\partial^\beta h^{\alpha}{}_{\alpha} + 74\,c_1\,\partial_\beta\partial_\alpha h^{\delta}{}_{\delta}\,\partial_\chi\mathcal{A}^{\alpha\beta\chi} +$$
$$2\,a_0\,\partial^\beta h^{\alpha}{}_{\alpha}\,\partial_\chi h_\beta{}^{\chi} + 2\,a_0\,\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\,(2\,\mathcal{A}^{\chi}{}_{\beta\chi} - \partial_\beta h^{\chi}{}_{\chi} + 2\,\partial_\chi h_\beta{}^{\chi}) + 6\,c_1\,\partial_\beta\mathcal{A}^{\alpha\beta\chi}\,\partial_\chi\partial_\alpha h^{\delta}{}_{\delta} - 4\,a_0\,h^{\alpha\beta}\,\partial_\chi\partial_\beta h_\alpha{}^{\chi} + 2\,a_0\,h^{\alpha}{}_{\alpha}\,\partial_\chi\partial_\beta h^{\beta\chi} +$$
$$2\,a_0\,h^{\alpha\beta}\,\partial_\chi\partial^\chi h_{\alpha\beta} - 2\,a_0\,h^{\alpha}{}_{\alpha}\,\partial_\chi\partial^\chi h^{\beta}{}_{\beta} + 4\,a_0\,h_{\beta\chi}\,\partial^\chi\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta} - 4\,c_1\,\partial_\beta\mathcal{A}_\chi{}^{\delta}{}_{\delta}\,\partial^\chi\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta} - 4\,c_1\,\partial_\beta\mathcal{A}^{\delta}{}_{\delta\chi}\,\partial^\chi\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta} + 4\,c_1\,\partial_\chi\mathcal{A}_\beta{}^{\delta}{}_{\delta}\,\partial^\chi\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta} -$$
$$4\,c_1\,\partial_\chi\mathcal{A}_\beta{}^{\delta}{}_{\delta}\,\partial^\chi\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta} - 4\,c_1\,\partial_\chi\mathcal{A}^{\delta}{}_{\delta\beta}\,\partial^\chi\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta} - 6\,c_1\,\partial_\chi\partial_\beta h^{\delta}{}_{\delta}\,\partial^\chi\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta} - 44\,c_1\,\partial_\beta\mathcal{A}_\chi{}^{\delta}{}_{\delta}\,\partial^\chi\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta} + 76\,c_1\,\partial_\beta\mathcal{A}^{\delta}{}_{\chi\delta}\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_{\alpha} +$$
$$44\,c_1\,\partial_\chi\mathcal{A}_\beta{}^{\delta}{}_{\delta}\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_{\alpha} - 4\,c_1\,\partial_\chi\mathcal{A}^{\delta}{}_{\beta\delta}\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_{\alpha} - 74\,c_1\,\partial_\chi\partial_\beta h^{\delta}{}_{\delta}\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_{\alpha} + 8\,c_1\,\partial_\alpha\mathcal{A}_\chi{}^{\delta}{}_{\delta}\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_{\beta} - 8\,c_1\,\partial_\chi\mathcal{A}_\alpha{}^{\delta}{}_{\delta}\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_{\beta} -$$
$$2\,a_0\,\partial_\beta h_{\alpha\chi}\,\partial^\chi h^{\alpha\beta} + a_0\,\partial_\chi h_{\alpha\beta}\,\partial^\chi h^{\alpha\beta} - 36\,c_1\,\partial_\chi\partial_\beta h^{\delta}{}_{\delta}\,\partial^\chi\partial_\alpha h^{\alpha\beta} + 17\,c_1\,\partial_\chi\partial_\beta h^{\delta}{}_{\delta}\,\partial^\chi\partial^\beta h^{\alpha}{}_{\alpha} - 4\,c_1\,\partial_\chi\mathcal{A}^{\alpha\beta\chi}\,\partial_\delta\mathcal{A}_{\alpha\beta}{}^{\delta} -$$
$$4\,c_1\,\partial_\beta\mathcal{A}^{\alpha\beta\chi}\,\partial_\delta\mathcal{A}_{\alpha\chi}{}^{\delta} - 4\,c_1\,\partial_\beta\mathcal{A}^{\alpha\beta\chi}\,\partial_\delta\mathcal{A}_\alpha{}^{\delta}{}_{\chi} + 76\,c_1\,\partial_\chi\mathcal{A}^{\alpha\beta\chi}\,\partial_\delta\mathcal{A}_{\beta\alpha}{}^{\delta} + 8\,c_1\,\partial^\chi\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\,\partial_\delta\mathcal{A}_\beta{}^{\delta}{}_{\chi} - 44\,c_1\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_{\beta}\,\partial_\delta\mathcal{A}_{\chi\alpha}{}^{\delta} +$$
$$4\,c_1\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_{\alpha}\,\partial_\delta\mathcal{A}_{\chi\beta}{}^{\delta} - 4\,c_1\,\partial_\beta\mathcal{A}^{\alpha\beta\chi}\,\partial_\delta\mathcal{A}_\chi{}^{\delta}{}_{\alpha} - 4\,c_1\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_{\beta}\,\partial_\delta\mathcal{A}_\chi{}^{\delta}{}_{\alpha} + 4\,c_1\,\partial^\chi\mathcal{A}_{\beta\alpha}{}^{\beta}\,\partial_\delta\mathcal{A}_\chi{}^{\delta\alpha} + 8\,c_1\,\partial^\chi\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\,\partial_\delta\mathcal{A}_{\chi\beta}{}^{\delta} -$$
$$4\,c_1\,\partial_\beta\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\,\partial_\delta\mathcal{A}^{\chi}{}_{\chi}{}^{\delta} + 8\,c_1\,\partial_\beta\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\,\partial_\delta\mathcal{A}^{\chi\delta}{}_{\chi} - 4\,c_1\,\partial_\beta\mathcal{A}^{\alpha\beta}{}_{\alpha}\,\partial_\delta\mathcal{A}^{\chi\delta}{}_{\chi} - 74\,c_1\,\partial_\chi\mathcal{A}^{\alpha\beta\chi}\,\partial_\delta\partial_\alpha h_\beta{}^{\delta} - 6\,c_1\,\partial_\beta\mathcal{A}^{\alpha\beta\chi}\,\partial_\delta\partial_\alpha h_\chi{}^{\delta} -$$
$$74\,c_1\,\partial_\chi\mathcal{A}^{\alpha\beta\chi}\,\partial_\delta\partial_\beta h_\alpha{}^{\delta} + 3\,c_1\,\partial_\chi\partial^\chi h^{\alpha\beta}\,\partial_\delta\partial_\beta h_\alpha{}^{\delta} + 37\,c_1\,\partial_\alpha\partial^\chi h^{\alpha\beta}\,\partial_\delta\partial_\beta h_\chi{}^{\delta} + 6\,c_1\,\partial^\chi\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\,\partial_\delta\partial_\beta h_\chi{}^{\delta} + 74\,c_1\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_{\alpha}\,\partial_\delta\partial_\beta h_\chi{}^{\delta} -$$
$$3\,c_1\,\partial^\chi\partial_\alpha h^{\alpha\beta}\,\partial_\delta\partial_\beta h_\chi{}^{\delta} + 26\,c_1\,\partial^\chi\partial^\beta h^{\alpha}{}_{\alpha}\,\partial_\delta\partial_\beta h_\chi{}^{\delta} - 6\,c_1\,\partial_\beta\mathcal{A}^{\alpha\beta\chi}\,\partial_\delta\partial_\chi h_\alpha{}^{\delta} - 43\,c_1\,\partial_\alpha\partial^\chi h^{\alpha\beta}\,\partial_\delta\partial_\chi h_\beta{}^{\delta} + 6\,c_1\,\partial^\chi\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\,\partial_\delta\partial_\chi h_\beta{}^{\delta} +$$
$$74\,c_1\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_{\alpha}\,\partial_\delta\partial_\chi h_\beta{}^{\delta} + 77\,c_1\,\partial^\chi\partial_\alpha h^{\alpha\beta}\,\partial_\delta\partial_\chi h_\beta{}^{\delta} - 58\,c_1\,\partial^\chi\partial^\beta h^{\alpha}{}_{\alpha}\,\partial_\delta\partial_\chi h_\beta{}^{\delta} + 8\,c_1\,\partial_\beta\mathcal{A}^{\alpha\beta}{}_{\alpha}\,\partial_\delta\partial_\chi h^{\chi\delta} - 8\,c_1\,\partial_\beta\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\,\partial_\delta\partial_\chi h^{\chi\delta} -$$
$$4\,c_1\,\partial_\beta\partial_\alpha h^{\alpha\beta}\,\partial_\delta\partial_\chi h^{\chi\delta} + 8\,c_1\,\partial_\beta\partial^\beta h^{\alpha}{}_{\alpha}\,\partial_\delta\partial_\chi h^{\chi\delta} + 74\,c_1\,\partial_\chi\mathcal{A}^{\alpha\beta\chi}\,\partial_\delta\partial^\delta h_{\alpha\beta} + 17\,c_1\,\partial_\chi\partial^\chi h^{\alpha\beta}\,\partial_\delta\partial^\delta h_{\alpha\beta} + 6\,c_1\,\partial_\beta\mathcal{A}^{\alpha\beta\chi}\,\partial_\delta\partial^\delta h_{\alpha\chi} +$$
$$2\,c_1\,\partial_\alpha\partial^\chi h^{\alpha\beta}\,\partial_\delta\partial^\delta h_{\beta\chi} - 6\,c_1\,\partial^\chi\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\,\partial_\delta\partial^\delta h_{\beta\chi} - 74\,c_1\,\partial^\chi\mathcal{A}^{\alpha\beta}{}_{\alpha}\,\partial_\delta\partial^\delta h_{\beta\chi} - 73\,c_1\,\partial^\chi\partial_\alpha h^{\alpha\beta}\,\partial_\delta\partial^\delta h_{\beta\chi} + 34\,c_1\,\partial^\chi\partial^\beta h^{\alpha}{}_{\alpha}\,\partial_\delta\partial^\delta h_{\beta\chi} -$$
$$8\,c_1\,\partial_\beta\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\,\partial_\delta\partial^\delta h^{\chi}{}_{\chi} + 8\,c_1\,\partial_\beta\mathcal{A}^{\alpha\beta}{}_{\alpha}\,\partial_\delta\partial^\delta h^{\chi}{}_{\chi} - 4\,c_1\,\partial_\beta\partial^\beta h^{\alpha}{}_{\alpha}\,\partial_\delta\partial^\delta h^{\chi}{}_{\chi} + 4\,c_1\,\partial_\alpha\mathcal{A}_{\beta\chi\delta}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} + 8\,c_1\,\partial_\alpha\mathcal{A}_{\beta\delta\chi}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} +$$
$$8\,c_1\,\partial_\alpha\mathcal{A}_{\chi\beta\delta}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} + 4\,c_1\,\partial_\alpha\mathcal{A}_{\chi\delta\beta}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} + 8\,c_1\,\partial_\alpha\mathcal{A}_{\delta\beta\chi}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} + 8\,c_1\,\partial_\alpha\mathcal{A}_{\delta\chi\beta}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} - 4\,c_1\,\partial_\beta\mathcal{A}_{\alpha\chi\delta}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} -$$
$$4\,c_1\,\partial_\beta\mathcal{A}_{\alpha\delta\chi}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} - 4\,c_1\,\partial_\beta\mathcal{A}_{\chi\delta\alpha}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} - 12\,c_1\,\partial_\beta\partial_\alpha h_{\chi\delta}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} - 4\,c_1\,\partial_\chi\mathcal{A}_{\alpha\beta\delta}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} - 4\,c_1\,\partial_\chi\mathcal{A}_{\beta\alpha\delta}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} +$$
$$8\,c_1\,\partial_\chi\mathcal{A}_{\beta\delta\alpha}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} + 12\,c_1\,\partial_\chi\partial_\alpha h_{\beta\delta}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} - 8\,c_1\,\partial_\delta\mathcal{A}_{\alpha\beta\chi}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} - 8\,c_1\,\partial_\delta\mathcal{A}_{\alpha\chi\beta}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} - 4\,c_1\,\partial_\delta\mathcal{A}_{\beta\alpha\chi}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} -$$
$$4\,c_1\,\partial_\delta\mathcal{A}_{\beta\chi\alpha}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} - 4\,c_1\,\partial_\delta\mathcal{A}_{\chi\beta\alpha}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} + 12\,c_1\,\partial_\delta\partial_\beta h_{\alpha\chi}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} - 12\,c_1\,\partial_\delta\partial_\chi h_{\alpha\beta}\,\partial^\delta\mathcal{A}^{\alpha\beta\chi} + 4\,c_1\,\partial_\delta\mathcal{A}_{\beta\alpha}{}^{\beta}\,\partial^\delta\mathcal{A}^{\chi\alpha}{}_{\chi} +$$
$$4\,c_1\,\partial_\delta\mathcal{A}_{\beta\alpha}{}^{\beta}\,\partial^\delta\mathcal{A}^{\chi}{}_{\chi}{}^{\alpha} - 6\,c_1\,\partial_\beta\partial_\alpha h_{\chi\delta}\,\partial^\delta\partial^\chi h^{\alpha\beta} + 12\,c_1\,\partial_\delta\partial_\alpha h_{\beta\chi}\,\partial^\delta\partial^\chi h^{\alpha\beta} - 6\,c_1\,\partial_\delta\partial_\chi h_{\alpha\beta}\,\partial^\delta\partial^\chi h^{\alpha\beta}\big)\Big)[t,x,y,z]\,dz\,dy\,dx\,dt$$

	$1^+\!\cdot\mathcal{A}_a{}^{\parallel}{}_{\alpha\beta}$	$1^+\!\cdot\mathcal{A}_a{}^{\perp}{}_{\alpha\beta}$	$1^+\!\cdot\mathcal{A}_s{}^{\perp}{}_{\alpha\beta}$	$1^-\!\cdot h^{\perp}{}_{\alpha}$	$1^-\!\cdot\mathcal{A}_a{}^{\parallel}{}_{\alpha}$	$1^-\!\cdot\mathcal{A}_a{}^{\perp}{}_{\alpha}$	$1^-\!\cdot\mathcal{A}_s{}^{\perp t}{}_{\alpha}$	$1^-\!\cdot\mathcal{A}_s{}^{\parallel t}{}_{\alpha}$	$1^-\!\cdot\mathcal{A}_s{}^{\perp h}{}_{\alpha}$	$1^-\!\cdot\mathcal{A}_s{}^{\parallel h}{}_{\alpha}$
$1^+\!\cdot\mathcal{A}_a{}^{\parallel}\dagger^{\alpha\beta}$	$\frac{1}{4}(-a_0-15\,c_1\,k^2)$	$-\frac{a_0}{2\sqrt{2}}$	$5\,c_1\,k^2$	0	0 0		0	0	0	0
$1^+\!\cdot\mathcal{A}_a{}^{\perp}\dagger^{\alpha\beta}$	$-\frac{a_0}{2\sqrt{2}}$	0	0 0		0 0		0	0	0	0
$1^+\!\cdot\mathcal{A}_s{}^{\perp}\dagger^{\alpha\beta}$	$5\,c_1\,k^2$	0	$\frac{1}{4}(a_0-29\,c_1\,k^2)$	0	0 0		0	0	0	0
$1^-\!\cdot h^{\perp}\dagger^{\alpha}$	0 0		0 0	0		0	0	0	0	0
$1^-\!\cdot\mathcal{A}_a{}^{\parallel}\dagger^{\alpha}$	0 0		0	0	$\frac{1}{4}(-a_0-3\,c_1\,k^2)$	$\frac{a_0}{2\sqrt{2}}$	$\frac{5}{2}\sqrt{3}\,c_1\,k^2$	$-\frac{5}{2}\sqrt{\frac{5}{3}}\,c_1\,k^2$	$5\sqrt{\frac{3}{2}}\,c_1\,k^2$	$-\frac{5\,c_1\,k^2}{\sqrt{3}}$
$1^-\!\cdot\mathcal{A}_a{}^{\perp}\dagger^{\alpha}$	0 0		0	0	$\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0
$1^-\!\cdot\mathcal{A}_s{}^{\perp t}\dagger^{\alpha}$	0 0		0 0		$\frac{5}{2}\sqrt{3}\,c_1\,k^2$	0	$-\frac{a_0}{3}$	$\frac{1}{6}\sqrt{5}\,(a_0-8\,c_1\,k^2)$	$-\frac{a_0}{6\sqrt{2}}$	$\frac{1}{6}(-a_0+20\,c_1\,k^2)$
$1^-\!\cdot\mathcal{A}_s{}^{\parallel t}\dagger^{\alpha}$	0 0		0 0		$-\frac{5}{2}\sqrt{\frac{5}{3}}\,c_1\,k^2$	0	$\frac{1}{6}\sqrt{5}\,(a_0-8\,c_1\,k^2)$	$\frac{1}{3}(a_0+7\,c_1\,k^2)$	$-\frac{1}{6}\sqrt{\frac{5}{2}}\,(a_0+16\,c_1\,k^2)$	$-\frac{1}{6}\sqrt{5}\,(a_0-5\,c_1\,k^2)$
$1^-\!\cdot\mathcal{A}_s{}^{\perp h}\dagger^{\alpha}$	0 0		0 0		$5\sqrt{\frac{3}{2}}\,c_1\,k^2$	0	$-\frac{a_0}{6\sqrt{2}}$	$-\frac{1}{6}\sqrt{\frac{5}{2}}\,(a_0+16\,c_1\,k^2)$	$\frac{a_0}{3}$	$\frac{a_0+40\,c_1\,k^2}{6\sqrt{2}}$
$1^-\!\cdot\mathcal{A}_s{}^{\parallel h}\dagger^{\alpha}$	0 0		0 0		$-\frac{5\,c_1\,k^2}{\sqrt{3}}$	0	$\frac{1}{6}(-a_0+20\,c_1\,k^2)$	$-\frac{1}{6}\sqrt{5}\,(a_0-5\,c_1\,k^2)$	$\frac{a_0+40\,c_1\,k^2}{6\sqrt{2}}$	$\frac{5}{12}(a_0-17\,c_1\,k^2)$

	$0^+\!\cdot\mathcal{T}^{\perp}$	$0^+\!\cdot\mathcal{T}^{\parallel}$	$0^+\!\cdot\mathcal{W}_a{}^{\parallel}$	$0^+\!\cdot\mathcal{W}_s{}^{\perp t}$	$0^+\!\cdot\mathcal{W}_s{}^{\parallel}$	$0^+\!\cdot\mathcal{W}_s{}^{\perp h}$	$0^-\!\cdot\mathcal{W}_a{}^{\parallel}$
$0^+\!\cdot\mathcal{T}^{\perp}\dagger$	0	0 0		0	0 0		0
$0^+\!\cdot\mathcal{T}^{\parallel}\dagger$	0	$\frac{4(a_0-25\,c_1\,k^2)}{a_0^2\,k^2}$	$\frac{50\,i\sqrt{2}\,c_1\,k}{a_0^2}$	$-\frac{20\,i\sqrt{3}\,c_1\,k}{a_0^2}$	$\frac{20\,i\,c_1\,k}{\sqrt{3}\,a_0^2}$	$\frac{20\,i\sqrt{\frac{2}{3}}\,c_1\,k}{a_0^2}$	0
$0^+\!\cdot\mathcal{W}_a{}^{\parallel}\dagger$	0	$-\frac{50\,i\sqrt{2}\,c_1\,k}{a_0^2}$	$-\frac{2(a_0+25\,c_1\,k^2)}{a_0^2}$	$\frac{10\sqrt{6}\,c_1\,k^2}{a_0^2}$	$-\frac{10\sqrt{\frac{2}{3}}\,c_1\,k^2}{a_0^2}$	$-\frac{20\,c_1\,k^2}{\sqrt{3}\,a_0^2}$	0
$0^+\!\cdot\mathcal{W}_s{}^{\perp t}\dagger$	0	$\frac{20\,i\sqrt{3}\,c_1\,k}{a_0^2}$	$\frac{10\sqrt{6}\,c_1\,k^2}{a_0^2}$	$-\frac{3(a_0+23\,c_1\,k^2)}{4\,a_0^2}$	$\frac{5\,a_0+23\,c_1\,k^2}{4\,a_0^2}$	$-\frac{a_0-23\,c_1\,k^2}{2\sqrt{2}\,a_0^2}$	0
$0^+\!\cdot\mathcal{W}_s{}^{\parallel}\dagger$	0	$-\frac{20\,i\,c_1\,k}{\sqrt{3}\,a_0^2}$	$-\frac{10\sqrt{\frac{2}{3}}\,c_1\,k^2}{a_0^2}$	$\frac{5\,a_0+23\,c_1\,k^2}{4\,a_0^2}$	$-\frac{9\,a_0+23\,c_1\,k^2}{12\,a_0^2}$	$-\frac{3\,a_0+23\,c_1\,k^2}{6\sqrt{2}\,a_0^2}$	0
$0^+\!\cdot\mathcal{W}_s{}^{\perp h}\dagger$	0	$-\frac{20\,i\sqrt{\frac{2}{3}}\,c_1\,k}{a_0^2}$	$-\frac{20\,c_1\,k^2}{\sqrt{3}\,a_0^2}$	$-\frac{a_0-23\,c_1\,k^2}{2\sqrt{2}\,a_0^2}$	$-\frac{3\,a_0+23\,c_1\,k^2}{6\sqrt{2}\,a_0^2}$	$\frac{3\,a_0-23\,c_1\,k^2}{6\,a_0^2}$	0
$0^-\!\cdot\mathcal{W}_a{}^{\parallel}\dagger$	0	0 0		0	0 0		$-\frac{2}{a_0-c_1\,k^2}$

	$0^+\!\cdot h^{\perp}$	$0^+\!\cdot h^{\parallel}$	$0^+\!\cdot\mathcal{A}_a{}^{\parallel}$	$0^+\!\cdot\mathcal{A}_s{}^{\perp t}$	$0^+\!\cdot\mathcal{A}_s{}^{\parallel}$	$0^+\!\cdot\mathcal{A}_s{}^{\perp h}$	$0^-\!\cdot\mathcal{A}_a{}^{\parallel}$
$0^+\!\cdot h^{\perp}\dagger$	0	0	0 0	0		0	0
$0^+\!\cdot h^{\parallel}\dagger$	0	$\frac{1}{4}k^2(a_0+25\,c_1\,k^2)$	$\frac{25\,i\,c_1\,k^3}{2\sqrt{2}}$	0	$\frac{10\,i\,c_1\,k^3}{\sqrt{3}}$	$-5\,i\sqrt{\frac{2}{3}}\,c_1\,k^3$	0
$0^+\!\cdot\mathcal{A}_a{}^{\parallel}\dagger$	0	$-\frac{25\,i\,c_1\,k^3}{2\sqrt{2}}$	$\frac{1}{2}(-a_0+25\,c_1\,k^2)$	0	$10\sqrt{\frac{2}{3}}\,c_1\,k^2$	$-\frac{10\,c_1\,k^2}{\sqrt{3}}$	0
$0^+\!\cdot\mathcal{A}_s{}^{\perp t}\dagger$	0	0	0 0		$\frac{a_0}{2}$	$-\frac{a_0}{2\sqrt{2}}$	0
$0^+\!\cdot\mathcal{A}_s{}^{\parallel}\dagger$	0	$-\frac{10\,i\,c_1\,k^3}{\sqrt{3}}$	$10\sqrt{\frac{2}{3}}\,c_1\,k^2$	$\frac{a_0}{2}$	$\frac{23\,c_1\,k^2}{3}$	$-\frac{3\,a_0+46\,c_1\,k^2}{6\sqrt{2}}$	0
$0^+\!\cdot\mathcal{A}_s{}^{\perp h}\dagger$	0	$5\,i\sqrt{\frac{2}{3}}\,c_1\,k^3$	$-\frac{10\,c_1\,k^2}{\sqrt{3}}$	$-\frac{a_0}{2\sqrt{2}}$	$-\frac{3\,a_0+46\,c_1\,k^2}{6\sqrt{2}}$	$\frac{1}{6}(3\,a_0+23\,c_1\,k^2)$	0
$0^-\!\cdot\mathcal{A}_a{}^{\parallel}\dagger$	0	0	0 0		0		$\frac{1}{2}(-a_0+c_1\,k^2)$

	$3^-\!\cdot\mathcal{A}_s{}^{\parallel}{}_{\alpha\beta\chi}$
$3^-\!\cdot\mathcal{A}_s{}^{\parallel}\dagger^{\alpha\beta\chi}$	$\frac{1}{2}(-a_0-7\,c_1\,k^2)$

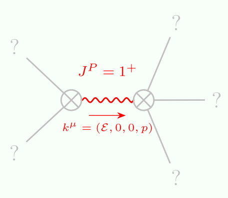
	$3^-\!\cdot\mathcal{W}_s{}^{\parallel}{}_{\alpha\beta\chi}$
$3^-\!\cdot\mathcal{W}_s{}^{\parallel}\dagger^{\alpha\beta\chi}$	$-\frac{2}{a_0+7\,c_1\,k^2}$

	$2^+\!\cdot\mathcal{T}^{\parallel}{}_{\alpha\beta}$	$2^+\!\cdot\mathcal{W}_a{}^{\parallel}{}_{\alpha\beta}$	$2^+\!\cdot\mathcal{W}_s{}^{\parallel}{}_{\alpha\beta}$	$2^+\!\cdot\mathcal{W}_s{}^{\perp}{}_{\alpha\beta}$	$2^-\!\cdot\mathcal{W}_a{}^{\parallel}{}_{\alpha\beta\chi}$	$2^-\!\cdot\mathcal{W}_s{}^{\parallel}{}_{\alpha\beta\chi}$
$2^+\!\cdot\mathcal{T}^{\parallel}\dagger^{\alpha\beta}$	$-\frac{8(a_0+11\,c_1\,k^2)}{a_0^2\,k^2}$	$\frac{44\,i\sqrt{2}\,c_1\,k}{a_0^2}$	$\frac{80\,i\,c_1\,k}{\sqrt{3}\,a_0^2}$	$\frac{80\,i\sqrt{\frac{2}{3}}\,c_1\,k}{a_0^2}$	0	0
$2^+\!\cdot\mathcal{W}_a{}^{\parallel}\dagger^{\alpha\beta}$	$-\frac{44\,i\sqrt{2}\,c_1\,k}{a_0^2}$	$\frac{4(a_0-11\,c_1\,k^2)}{a_0^2}$	$-\frac{40\sqrt{\frac{2}{3}}\,c_1\,k^2}{a_0^2}$	$-\frac{80\,c_1\,k^2}{\sqrt{3}\,a_0^2}$	0	0
$2^+\!\cdot\mathcal{W}_s{}^{\parallel}\dagger^{\alpha\beta}$	$-\frac{80\,i\,c_1\,k}{\sqrt{3}\,a_0^2}$	$-\frac{40\sqrt{\frac{2}{3}}\,c_1\,k^2}{a_0^2}$	$-\frac{2(3\,a_0+c_1\,k^2)}{3\,a_0^2}$	$-\frac{2\sqrt{2}\,c_1\,k^2}{3\,a_0^2}$	0	0
$2^+\!\cdot\mathcal{W}_s{}^{\perp}\dagger^{\alpha\beta}$	$-\frac{80\,i\sqrt{\frac{2}{3}}\,c_1\,k}{a_0^2}$	$-\frac{80\,c_1\,k^2}{\sqrt{3}\,a_0^2}$	$-\frac{2\sqrt{2}\,c_1\,k^2}{3\,a_0^2}$	$\frac{4(3\,a_0-c_1\,k^2)}{3\,a_0^2}$	0	0
$2^-\!\cdot\mathcal{W}_a{}^{\parallel}\dagger^{\alpha\beta\chi}$	0	0 0		0	$\frac{4}{a_0-c_1\,k^2}$	0
$2^-\!\cdot\mathcal{W}_s{}^{\parallel}\dagger^{\alpha\beta\chi}$	0	0 0		0	0	$\frac{4}{a_0-5\,c_1\,k^2}$

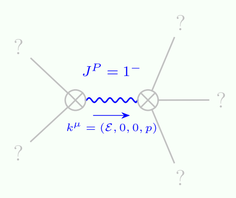
	$2^+\!\cdot h^{\parallel}{}_{\alpha\beta}$	$2^+\!\cdot\mathcal{A}_a{}^{\parallel}{}_{\alpha\beta}$	$2^+\!\cdot\mathcal{A}_s{}^{\parallel}{}_{\alpha\beta}$	$2^+\!\cdot\mathcal{A}_s{}^{\perp}{}_{\alpha\beta}$	$2^-\!\cdot\mathcal{A}_a{}^{\parallel}{}_{\alpha\beta\chi}$	$2^-\!\cdot\mathcal{A}_s{}^{\parallel}{}_{\alpha\beta\chi}$
$2^+\!\cdot h^{\parallel}\dagger^{\alpha\beta}$	$-\frac{1}{8}k^2(a_0-11\,c_1\,k^2)$	$\frac{11\,i\,c_1\,k^3}{4\sqrt{2}}$	$-\frac{5\,i\,c_1\,k^3}{\sqrt{3}}$	$\frac{5\,i\,c_1\,k^3}{\sqrt{6}}$	0	0
$2^+\!\cdot\mathcal{A}_a{}^{\parallel}\dagger^{\alpha\beta}$	$-\frac{11\,i\,c_1\,k^3}{4\sqrt{2}}$	$\frac{1}{4}(a_0+11\,c_1\,k^2)$	$-5\sqrt{\frac{2}{3}}\,c_1\,k^2$	$\frac{5\,c_1\,k^2}{\sqrt{3}}$	0	0
$2^+\!\cdot\mathcal{A}_s{}^{\parallel}\dagger^{\alpha\beta}$	$\frac{5\,i\,c_1\,k^3}{\sqrt{3}}$	$-5\sqrt{\frac{2}{3}}\,c_1\,k^2$	$\frac{1}{6}(-3\,a_0+c_1\,k^2)$	$-\frac{c_1\,k^2}{6\sqrt{2}}$	0	0
$2^+\!\cdot\mathcal{A}_s{}^{\perp}\dagger^{\alpha\beta}$	$-\frac{5\,i\,c_1\,k^3}{\sqrt{6}}$	$\frac{5\,c_1\,k^2}{\sqrt{3}}$	$-\frac{c_1\,k^2}{6\sqrt{2}}$	$\frac{1}{12}(3\,a_0+c_1\,k^2)$	0	0
$2^-\!\cdot\mathcal{A}_a{}^{\parallel}\dagger^{\alpha\beta\chi}$	0 0		0	0	$\frac{1}{4}(a_0-c_1\,k^2)$	0
$2^-\!\cdot\mathcal{A}_s{}^{\parallel}\dagger^{\alpha\beta\chi}$	0 0		0	0 0		$\frac{1}{4}(a_0-5\,c_1\,k^2)$

Spin-parity form	Covariant form	Multiplicities
$0^+\!\cdot\mathcal{W}_s{}^{\parallel} + 2\,0^+\!\cdot\mathcal{W}_s{}^{\perp h} + 3\,0^+\!\cdot\mathcal{W}_s{}^{\perp t} == 0$	$\partial_\alpha\mathcal{W}^{\alpha\beta}{}_{\beta} == 0$	1
$0^+\!\cdot\mathcal{T}^{\perp} == 0$	$\partial_\beta\partial_\alpha\mathcal{T}^{\alpha\beta} == 0$	1
$2\,1^-\!\cdot\mathcal{W}_s{}^{\parallel h\alpha} + 1^-\!\cdot\mathcal{W}_s{}^{\parallel t\alpha} + 2\,1^-\!\cdot\mathcal{W}_s{}^{\perp h\alpha} + 1^-\!\cdot\mathcal{W}_s{}^{\perp t\alpha} == 0$	$\partial_\beta\partial^\alpha\mathcal{W}^{\beta\chi}{}_{\chi} == \partial_\chi\partial^\chi\mathcal{W}^{\alpha\beta}{}_{\beta}$	3
$1^-\!\cdot\mathcal{T}^{\perp\alpha} == 0$	$\partial_\chi\partial_\beta\partial^\alpha\mathcal{T}^{\beta\chi} == \partial_\chi\partial^\chi\partial_\beta\mathcal{T}^{\alpha\beta}$	3
Total expected gauge generators:		8

Massive and massless spectra



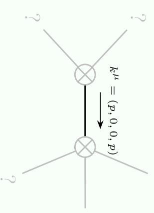
Massive particle



Massive particle

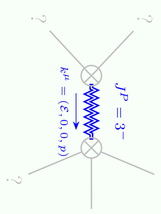
Massless particle

Pole residue:	$-\frac{1}{a_0} > 0$
Polarisations:	2



Massive particle

Poleresidue:	$\frac{2}{7\,c_1} > 0$
Square mass:	$-\frac{a_0}{7\,c_1} > 0$
Spin:	3
Parity:	Odd

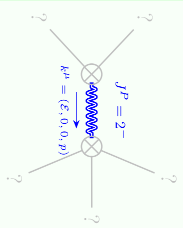


Pole residue:	$-\frac{4164}{24389\,c_1} > 0$
Square mass:	$\frac{a_0}{29\,c_1} > 0$
Spin:	1
Parity:	Even

Poleresidue:	$-\frac{4907}{35937\,c_1} > 0$
Square mass:	$\frac{a_0}{33\,c_1} > 0$
Spin:	1
Parity:	Odd

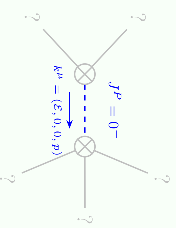
Massive particle

Poleresidue:	$\frac{4}{5\,c_1} > 0$
Square mass:	$\frac{a_0}{5\,c_1} > 0$
Spin:	2
Parity:	Odd



Massive particle

Pole residue:	$-\frac{2}{c_1} > 0$
Square mass:	$\frac{a_0}{c_1} > 0$
Spin:	0
Parity:	Odd



Unitarity conditions

(Demonstrably impossible)