PSALTer results panel

$$\mathcal{S}==\iiiint\Big(\tfrac{1}{4}\big(2a_{0}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}\mathcal{A}^{\chi}{}_{\beta\chi}+\mathcal{A}^{\alpha\beta\chi}(-2a_{0}\mathcal{A}_{\beta\chi\alpha}+4\mathcal{W}_{\alpha\beta\chi})+4\mathcal{T}^{\alpha\beta}h_{\alpha\beta}-a_{0}h^{\chi}{}_{\chi}\partial_{\beta}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}+a_{0}h^{\chi}{}_{\chi}\partial_{\beta}\mathcal{A}^{\alpha\beta}{}_{\alpha}-2a_{0}h_{\alpha\chi}\partial_{\beta}\mathcal{A}^{\alpha\beta\chi}+2a_{0}h_{\beta\chi}\partial^{\chi}\mathcal{A}^{\alpha}{}_{\alpha}{}^{\beta}+4c_{1}\partial_{\alpha}\mathcal{A}_{\mu\beta\chi}\partial^{\mu}\mathcal{A}^{\alpha\beta\chi}+4c_{2}\partial_{\alpha}\mathcal{A}_{\mu\chi\beta}\partial^{\mu}\mathcal{A}^{\alpha\beta\chi}-4c_{1}\partial_{\mu}\mathcal{A}_{\alpha\beta\chi}\partial^{\mu}\mathcal{A}^{\alpha\beta\chi}-4c_{2}\partial_{\mu}\mathcal{A}_{\alpha\chi\beta}\partial^{\mu}\mathcal{A}^{\alpha\beta\chi}\big)\Big)[t,x,y,z]\,dz\,dy\,dx\,dt$$

Wave operator

	$^{0^+}h^{\perp}$	$^{0^+}h^{\parallel}$	$^{0^+}\mathcal{A}_a{}^{\parallel}$	$^{0^+}\mathcal{A}_s{}^{\perp t}$	$^{0^+}\mathcal{A}_s{}^{\parallel}$	$^{0^+}\mathcal{A}_s{}^{\perp h}$	$^{0^-}\mathcal{A}_a{}^{\parallel}$
$^{0^+}h^{\perp}\dagger$	0	0	0	0	$\frac{i a_{0} k}{4}$	$-\frac{i a_{0} k}{4\sqrt{2}}$	0
$^{0^+}h^{\parallel}\dagger$	0	0	$\frac{i a_{0} k}{2\sqrt{2}}$	0	$-\frac{i a_{0} k}{4\sqrt{3}}$	$\frac{i a_{0} k}{4\sqrt{6}}$	0
$^{0^+}\mathcal{A}_a{}^{\parallel}\dagger$	0	$-\frac{i a_{0} k}{2\sqrt{2}}$	$-\frac{a_{0}}{2}+(-c_{1}+c_{2})k^2$	0	0	0	0
$^{0^+}\mathcal{A}_s{}^{\perp t}\dagger$	0	0	0	0	$\frac{a_{0}}{2}$	$-\frac{a_{0}}{2\sqrt{2}}$	0
$^{0^+}\mathcal{A}_s{}^{\parallel}\dagger$	$-\frac{1}{4} i a_{0} k$	$\frac{i a_{0} k}{4\sqrt{3}}$	0	$\frac{a_{0}}{2}$	$-\frac{2}{3}(c_{1}+c_{2})k^2$	$\frac{-3a_{0}+4(c_{1}+c_{2})k^2}{6\sqrt{2}}$	0
$^{0^+}\mathcal{A}_s{}^{\perp h}\dagger$	$\frac{i a_{0} k}{4\sqrt{2}}$	$-\frac{i a_{0} k}{4\sqrt{6}}$	0	$-\frac{a_{0}}{2\sqrt{2}}$	$\frac{-3a_{0}+4(c_{1}+c_{2})k^2}{6\sqrt{2}}$	$\frac{1}{6}(3a_{0}-2(c_{1}+c_{2})k^2)$	0
$^{0^-}\mathcal{A}_a{}^{\parallel}\dagger$	0	0	0	0	0	0	$-\frac{a_{0}}{2}+(-c_{1}+c_{2})k^2$

	$^{1^+}\mathcal{A}_a{}^{\parallel}{}_{\alpha\beta}$	$^{1^+}\mathcal{A}_a{}^{\perp}{}_{\alpha\beta}$	$^{1^+}\mathcal{A}_s{}^{\perp}{}_{\alpha\beta}$	$^{1^-}h^{\perp}{}_{\alpha}$	$^{1^-}\mathcal{A}_a{}^{\parallel}{}_{\alpha}$	$^{1^-}\mathcal{A}_a{}^{\perp}{}_{\alpha}$	$^{1^-}\mathcal{A}_s{}^{\perp t}{}_{\alpha}$	$^{1^-}\mathcal{A}_s{}^{\parallel t}{}_{\alpha}$	$^{1^-}\mathcal{A}_s{}^{\perp h}{}_{\alpha}$	$^{1^-}\mathcal{A}_s{}^{\parallel h}{}_{\alpha}$
$^{1^+}\mathcal{A}_a{}^{\parallel}\dagger^{\alpha\beta}$	$-\frac{a_{0}}{4}+(-c_{1}+c_{2})k^2$	$-\frac{a_{0}}{2\sqrt{2}}$	0	0	0	0	0	0	0	0
$^{1^+}\mathcal{A}_a{}^{\perp}\dagger^{\alpha\beta}$	$-\frac{a_{0}}{2\sqrt{2}}$	0	0	0	0	0	0	0	0	0
$^{1^+}\mathcal{A}_s{}^{\perp}\dagger^{\alpha\beta}$	0	0	$\frac{1}{4}(a_{0}-4(c_{1}+c_{2})k^2)$	0	0	0	0	0	0	0
$^{1^-}h^{\perp}\dagger^{\alpha}$	0	0	0	0	$\frac{i a_{0} k}{4\sqrt{2}}$	0	$-\frac{i a_{0} k}{4\sqrt{6}}$	$\frac{1}{4} i\sqrt{\frac{5}{6}}a_{0} k$	$-\frac{i a_{0} k}{4\sqrt{3}}$	$-\frac{i a_{0} k}{4\sqrt{6}}$
$^{1^-}\mathcal{A}_a{}^{\parallel}\dagger^{\alpha}$	0	0	0	$-\frac{i a_{0} k}{4\sqrt{2}}$	$-\frac{a_{0}}{4}+(-c_{1}+c_{2})k^2$	$\frac{a_{0}}{2\sqrt{2}}$	0	0	0	0
$^{1^-}\mathcal{A}_a{}^{\perp}\dagger^{\alpha}$	0	0	0	0	$\frac{a_{0}}{2\sqrt{2}}$	0	0	0	0	0
$^{1^-}\mathcal{A}_s{}^{\perp t}\dagger^{\alpha}$	0	0	0	$\frac{i a_{0} k}{4\sqrt{6}}$	0	0	$\frac{1}{3}(-a_{0}-(c_{1}+c_{2})k^2)$	$\frac{\sqrt{5}a_{0}}{6}$	$\frac{-a_{0}-4(c_{1}+c_{2})k^2}{6\sqrt{2}}$	$-\frac{a_{0}}{6}$
$^{1^-}\mathcal{A}_s{}^{\parallel t}\dagger^{\alpha}$	0	0	0	$-\frac{1}{4} i\sqrt{\frac{5}{6}}a_{0} k$	0	0	$\frac{\sqrt{5}a_{0}}{6}$	$\frac{1}{3}(a_{0}-3(c_{1}+c_{2})k^2)$	$-\frac{1}{6}\sqrt{\frac{5}{2}}a_{0}$	$-\frac{\sqrt{5}a_{0}}{6}$
$^{1^-}\mathcal{A}_s{}^{\perp h}\dagger^{\alpha}$	0	0	0	$\frac{i a_{0} k}{4\sqrt{3}}$	0	0	$\frac{-a_{0}-4(c_{1}+c_{2})k^2}{6\sqrt{2}}$	$-\frac{1}{6}\sqrt{\frac{5}{2}}a_{0}$	$\frac{1}{3}(a_{0}-2(c_{1}+c_{2})k^2)$	$\frac{a_{0}}{6\sqrt{2}}$
$^{1^-}\mathcal{A}_s{}^{\parallel h}\dagger^{\alpha}$	0	0	0	$\frac{i a_{0} k}{4\sqrt{6}}$	0	0	$-\frac{a_{0}}{6}$	$-\frac{\sqrt{5}a_{0}}{6}$	$\frac{a_{0}}{6\sqrt{2}}$	$\frac{5a_{0}}{12}-(c_{1}+c_{2})k^2$

	$^{2^+}h^{\parallel}{}_{\alpha\beta}$	$^{2^+}\mathcal{A}_a{}^{\parallel}{}_{\alpha\beta}$	$^{2^+}\mathcal{A}_s{}^{\parallel}{}_{\alpha\beta}$	$^{2^+}\mathcal{A}_s{}^{\perp}{}_{\alpha\beta}$	$^{2^-}\mathcal{A}_a{}^{\parallel}{}_{\alpha\beta\chi}$	$^{2^-}\mathcal{A}_s{}^{\parallel}{}_{\alpha\beta\chi}$
$^{2^+}h^{\parallel}\dagger^{\alpha\beta}$	0	$-\frac{i a_{0} k}{4\sqrt{2}}$	$-\frac{i a_{0} k}{4\sqrt{3}}$	$\frac{i a_{0} k}{4\sqrt{6}}$	0	0
$^{2^+}\mathcal{A}_a{}^{\parallel}\dagger^{\alpha\beta}$	$\frac{i a_{0} k}{4\sqrt{2}}$	$\frac{a_{0}}{4}+(-c_{1}+c_{2})k^2$	0	0	0	0
$^{2^+}\mathcal{A}_s{}^{\parallel}\dagger^{\alpha\beta}$	$\frac{i a_{0} k}{4\sqrt{3}}$	0	$\frac{1}{6}(-3a_{0}-4(c_{1}+c_{2})k^2)$	$\frac{1}{3}\sqrt{2}(c_{1}+c_{2})k^2$	0	0
$^{2^+}\mathcal{A}_s{}^{\perp}\dagger^{\alpha\beta}$	$-\frac{i a_{0} k}{4\sqrt{6}}$	0	$\frac{1}{3}\sqrt{2}(c_{1}+c_{2})k^2$	$\frac{a_{0}}{4}-\frac{1}{3}(c_{1}+c_{2})k^2$	0	0
$^{2^-}\mathcal{A}_a{}^{\parallel}\dagger^{\alpha\beta\chi}$	0	0	0	0	$\frac{a_{0}}{4}+(-c_{1}+c_{2})k^2$	0
$^{2^-}\mathcal{A}_s{}^{\parallel}\dagger^{\alpha\beta\chi}$	0	0	0	0	0	$\frac{1}{4}(a_{0}-4(c_{1}+c_{2})k^2)$

	$^{3^-}\mathcal{A}_s{}^{\parallel}{}_{\alpha\beta\chi}$
$^{3^-}\mathcal{A}_s{}^{\parallel}\dagger^{\alpha\beta\chi}$	$-\frac{a_{0}}{2}-(c_{1}+c_{2})k^2$

Saturated propagator

	$^{0^+}\mathcal{T}^{\perp}$	$^{0^+}\mathcal{T}^{\parallel}$	$^{0^+}\mathcal{W}_a{}^{\parallel}$	$^{0^+}\mathcal{W}_s{}^{\perp t}$	$^{0^+}\mathcal{W}_s{}^{\parallel}$	$^{0^+}\mathcal{W}_s{}^{\perp h}$	$^{0^-}\mathcal{W}_a{}^{\parallel}$
$^{0^+}\mathcal{T}^{\perp}\dagger$	$\frac{-36a_{0}k^2+24(5c_{1}+3c_{2})k^4}{a_{0}^2(16+3k^2)^2}$	$\frac{4\sqrt{3}(a_{0}+2(c_{1}-c_{2})k^2)}{a_{0}^2(16+3k^2)}$	$\frac{2i\sqrt{6}k}{16a_{0}+3a_{0}k^2}$	$\frac{24ik(-3a_{0}+2(5c_{1}+3c_{2})k^2)}{a_{0}^2(16+3k^2)^2}$	$\frac{8ik(19a_{0}+(3a_{0}-10c_{1}-6c_{2})k^2)}{a_{0}^2(16+3k^2)^2}$	$-\frac{4i\sqrt{2}k(10a_{0}+(3a_{0}+20c_{1}+12c_{2})k^2)}{a_{0}^2(16+3k^2)^2}$	0
$^{0^+}\mathcal{T}^{\parallel}\dagger$	$\frac{4\sqrt{3}(a_{0}+2(c_{1}-c_{2})k^2)}{a_{0}^2(16+3k^2)}$	$\frac{4(a_{0}+2(c_{1}-c_{2})k^2)}{a_{0}^2k^2}$	$\frac{2i\sqrt{2}}{a_{0}k}$	$\frac{8i\sqrt{3}(a_{0}+2(c_{1}-c_{2})k^2)}{a_{0}^2k(16+3k^2)}$	$-\frac{8i(a_{0}+2(c_{1}-c_{2})k^2)}{\sqrt{3}a_{0}^2k(16+3k^2)}$	$-\frac{8i\sqrt{\frac{2}{3}}(a_{0}+2(c_{1}-c_{2})k^2)}{a_{0}^2k(16+3k^2)}$	0
$^{0^+}\mathcal{W}_a{}^{\parallel}\dagger$	$-\frac{2i\sqrt{6}k}{16a_{0}+3a_{0}k^2}$	$-\frac{2i\sqrt{2}}{a_{0}k}$	0	$\frac{4\sqrt{6}}{16a_{0}+3a_{0}k^2}$	$-\frac{4\sqrt{\frac{2}{3}}}{16a_{0}+3a_{0}k^2}$	$-\frac{8}{\sqrt{3}(16a_{0}+3a_{0}k^2)}$	0
$^{0^+}\mathcal{W}_s{}^{\perp t}\dagger$	$\frac{24ik(3a_{0}-2(5c_{1}+3c_{2})k^2)}{a_{0}^2(16+3k^2)^2}$	$-\frac{8i\sqrt{3}(a_{0}+2(c_{1}-c_{2})k^2)}{a_{0}^2k(16+3k^2)}$	$\frac{4\sqrt{6}}{16a_{0}+3a_{0}k^2}$	$\frac{48(-3a_{0}+2(5c_{1}+3c_{2})k^2)}{a_{0}^2(16+3k^2)^2}$	$\frac{304a_{0}+16(3a_{0}-10c_{1}-6c_{2})k^2}{a_{0}^2(16+3k^2)^2}$	$-\frac{8\sqrt{2}(10a_{0}+(3a_{0}+20c_{1}+12c_{2})k^2)}{a_{0}^2(16+3k^2)^2}$	0
$^{0^+}\mathcal{W}_s{}^{\parallel}\dagger$	$-\frac{8ik(19a_{0}+(3a_{0}-10c_{1}-6c_{2})k^2)}{a_{0}^2(16+3k^2)^2}$	$\frac{8i(a_{0}+2(c_{1}-c_{2})k^2)}{\sqrt{3}a_{0}^2k(16+3k^2)}$	$-\frac{4\sqrt{\frac{2}{3}}}{16a_{0}+3a_{0}k^2}$	$\frac{304a_{0}+16(3a_{0}-10c_{1}-6c_{2})k^2}{a_{0}^2(16+3k^2)^2}$	$\frac{-560a_{0}+32(-3a_{0}+5c_{1}+3c_{2})k^2}{3a_{0}^2(16+3k^2)^2}$	$\frac{8\sqrt{2}(-22a_{0}+(-3a_{0}+20c_{1}+12c_{2})k^2)}{3a_{0}^2(16+3k^2)^2}$	0
$^{0^+}\mathcal{W}_s{}^{\perp h}\dagger$	$\frac{4i\sqrt{2}k(10a_{0}+(3a_{0}+20c_{1}+12c_{2})k^2)}{a_{0}^2(16+3k^2)^2}$	$\frac{8i\sqrt{\frac{2}{3}}(a_{0}+2(c_{1}-c_{2})k^2)}{a_{0}^2k(16+3k^2)}$	$-\frac{8}{\sqrt{3}(16a_{0}+3a_{0}k^2)}$	$-\frac{8\sqrt{2}(10a_{0}+(3a_{0}+20c_{1}+12c_{2})k^2)}{a_{0}^2(16+3k^2)^2}$	$\frac{8\sqrt{2}(-22a_{0}+(-3a_{0}+20c_{1}+12c_{2})k^2)}{3a_{0}^2(16+3k^2)^2}$	$\frac{416a_{0}+32(3a_{0}+10c_{1}+6c_{2})k^2}{3a_{0}^2(16+3k^2)^2}$	0
$^{0^-}\mathcal{W}_a{}^{\parallel}\dagger$	0	0	0	0	0	0	$-\frac{2}{a_{0}+2(c_{1}-c_{2})k^2}$

	$^{1^+}\mathcal{W}_a{}^{\parallel}{}_{\alpha\beta}$	$^{1^+}\mathcal{W}_a{}^{\perp}{}_{\alpha\beta}$	$^{1^+}\mathcal{W}_s{}^{\perp}{}_{\alpha\beta}$	$^{1^-}\mathcal{T}^{\perp}{}_{\alpha}$	$^{1^-}\mathcal{W}_a{}^{\parallel}{}_{\alpha}$	$^{1^-}\mathcal{W}_a{}^{\perp}{}_{\alpha}$	$^{1^-}\mathcal{W}_s{}^{\perp t}{}_{\alpha}$	$^{1^-}\mathcal{W}_s{}^{\parallel t}{}_{\alpha}$	$^{1^-}\mathcal{W}_s{}^{\perp h}{}_{\alpha}$	$^{1^-}\mathcal{W}_s{}^{\parallel h}{}_{\alpha}$
$^{1^+}\mathcal{W}_a{}^{\parallel}\dagger^{\alpha\beta}$	0	$-\frac{2\sqrt{2}}{a_{0}}$	0	0	0	0	0	0	0	0
$^{1^+}\mathcal{W}_a{}^{\perp}\dagger^{\alpha\beta}$	$-\frac{2\sqrt{2}}{a_{0}}$	$\frac{2(a_{0}+4(c_{1}-c_{2})k^2)}{a_{0}^2}$	0	0	0	0	0	0	0	0
$^{1^+}\mathcal{W}_s{}^{\perp}\dagger^{\alpha\beta}$	0	0	$\frac{4}{a_{0}-4(c_{1}+c_{2})k^2}$	0	0	0	0	0	0	0
$^{1^-}\mathcal{T}^{\perp}\dagger^{\alpha}$	0	0	0	$\frac{2k^2(a_{0}^2+4a_{0}(c_{1}-c_{2})k^2-8(2c_{1}-c_{2})(c_{1}+c_{2})k^4)}{a_{0}^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2)}$	$\frac{2i\sqrt{2}k}{a_{0}(2+k^2)}$	$\frac{ik(4a_{0}(c_{1}-7c_{2})k^2-2a_{0}(c_{1}+5c_{2})k^4+a_{0}^2(4+k^2)-8(c_{1}+c_{2})k^4(-2c_{2}(3+k^2)+c_{1}(6+k^2)))}{a_{0}^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2)}$	$-\frac{ik(6a_{0}^2+a_{0}(5a_{0}-32(c_{1}+c_{2}))k^2-8(-4(c_{1}+c_{2})^2+a_{0}(c_{1}+3c_{2}))k^4-16(c_{1}-2c_{2})(c_{1}+c_{2})k^6)}{\sqrt{6}a_{0}^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2)}$	$\frac{i\sqrt{\frac{5}{6}}k(a_{0}-4(c_{1}+c_{2})k^2)}{a_{0}(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$	$-\frac{2ik(3a_{0}^2+a_{0}(a_{0}+2(c_{1}+c_{2}))k^2-(a_{0}(c_{1}-3c_{2})+8(c_{1}+c_{2})^2)k^4+4(c_{1}-2c_{2})(c_{1}+c_{2})k^6)}{\sqrt{3}a_{0}^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2)}$	$\frac{i\sqrt{\frac{2}{3}}k(a_{0}+2(c_{1}+c_{2})k^2)}{a_{0}(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$
$^{1^-}\mathcal{W}_a{}^{\parallel}\dagger^{\alpha}$	0	0	0	$-\frac{2i\sqrt{2}k}{a_{0}(2+k^2)}$	0	$\frac{\sqrt{2}(4+k^2)}{a_{0}(2+k^2)}$	$-\frac{2k^2}{\sqrt{3}a_{0}(2+k^2)}$	0	$\frac{\sqrt{\frac{2}{3}}k^2}{a_{0}(2+k^2)}$	0
$^{1^-}\mathcal{W}_a{}^{\perp}\dagger^{\alpha}$	0	0	0	$-\frac{ik(4a_{0}(c_{1}-7c_{2})k^2-2a_{0}(c_{1}+5c_{2})k^4+a_{0}^2(4+k^2)-8(c_{1}+c_{2})k^4(-2c_{2}(3+k^2)+c_{1}(6+k^2)))}{a_{0}^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2)}$	$\frac{\sqrt{2}(4+k^2)}{a_{0}(2+k^2)}$	$\frac{a_{0}^2(4+k^2)^2-8(c_{1}+c_{2})k^4(2c_{1}(12+6k^2+k^4)-c_{2}(24+12k^2+k^4))+4a_{0}k^2(c_{1}(4+2k^2+k^4)-c_{2}(28+14k^2+k^4))}{2a_{0}^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2)}$	$\frac{a_{0}^2k^2(-2+k^2)+16(2c_{1}-c_{2})(c_{1}+c_{2})k^6(4+k^2)+4a_{0}k^4(-10c_{1}+6c_{2}+(-3c_{1}+c_{2})k^2)}{2\sqrt{6}a_{0}^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2)}$	$-\frac{\sqrt{\frac{5}{6}}k^2(a_{0}-4(c_{1}+c_{2})k^2)}{2a_{0}(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$	$\frac{-4(2c_{1}-c_{2})(c_{1}+c_{2})k^6(4+k^2)+a_{0}^2k^2(5+2k^2)+4a_{0}k^4(c_{1}-c_{2}(3+k^2))}{\sqrt{3}a_{0}^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2)}$	$-\frac{k^2(a_{0}+2(c_{1}+c_{2})k^2)}{\sqrt{6}a_{0}(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$
$^{1^-}\mathcal{W}_s{}^{\perp t}\dagger^{\alpha}$	0	0	0	$\frac{ik(6a_{0}^2+a_{0}(5a_{0}-32(c_{1}+c_{2}))k^2-8(-4(c_{1}+c_{2})^2+a_{0}(c_{1}+3c_{2}))k^4-16(c_{1}-2c_{2})(c_{1}+c_{2})k^6)}{\sqrt{6}a_{0}^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2)}$	$-\frac{2k^2}{\sqrt{3}a_{0}(2+k^2)}$	$\frac{a_{0}^2k^2(-2+k^2)+16(2c_{1}-c_{2})(c_{1}+c_{2})k^6(4+k^2)+4a_{0}k^4(-10c_{1}+6c_{2}+(-3c_{1}+c_{2})k^2)}{2\sqrt{6}a_{0}^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2)}$	$-((a_{0}^3(2+k^2)^2+8a_{0}^2(c_{1}+c_{2})k^2(8+5k^2)-32a_{0}(c_{1}+c_{2})k^4(10(c_{1}+c_{2})+6(c_{1}+c_{2})k^2+c_{1}k^4)+32(c_{1}+c_{2})^2k^6(8(c_{1}+c_{2})+4(c_{1}+c_{2})k^2+(2c_{1}-c_{2})k^4))/(12a_{0}^2(c_{1}+c_{2})k^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2)))$	$-\frac{\sqrt{5}(a_{0}-4(c_{1}+c_{2})k^2)(a_{0}(2+k^2)-2(c_{1}+c_{2})k^2(4+k^2))}{12a_{0}(c_{1}+c_{2})k^2(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$	$(-a_{0}^3(2+k^2)^2+a_{0}^2(c_{1}+c_{2})k^2(4+k^2)(2+3k^2)-4a_{0}(c_{1}+c_{2})k^4(16(c_{1}+c_{2})+6(c_{1}+c_{2})k^2+(c_{1}-3c_{2})k^4)+16(c_{1}+c_{2})^2k^6(8(c_{1}+c_{2})+4(c_{1}+c_{2})k^2+(2c_{1}-c_{2})k^4))/(6\sqrt{2}a_{0}^2(c_{1}+c_{2})k^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2))$	$\frac{(a_{0}+2(c_{1}+c_{2})k^2)(-a_{0}(2+k^2)+2(c_{1}+c_{2})k^2(4+k^2))}{6a_{0}(c_{1}+c_{2})k^2(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$
$^{1^-}\mathcal{W}_s{}^{\parallel t}\dagger^{\alpha}$	0	0	0	$-\frac{i\sqrt{\frac{5}{6}}k(a_{0}-4(c_{1}+c_{2})k^2)}{a_{0}(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$	0	$-\frac{\sqrt{\frac{5}{6}}k^2(a_{0}-4(c_{1}+c_{2})k^2)}{2a_{0}(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$	$-\frac{\sqrt{5}(a_{0}^2(2+k^2)+8(c_{1}+c_{2})^2k^4(4+k^2)-2a_{0}(c_{1}+c_{2})k^2(8+3k^2))}{12a_{0}(c_{1}+c_{2})k^2(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$	$\frac{-5a_{0}+16(c_{1}+c_{2})k^2}{12(c_{1}+c_{2})k^2(a_{0}-3(c_{1}+c_{2})k^2)}$	$\frac{\sqrt{\frac{5}{2}}(-a_{0}^2(2+k^2)+4(c_{1}+c_{2})^2k^4(4+k^2)+a_{0}(c_{1}+c_{2})k^2(4+3k^2))}{6a_{0}(c_{1}+c_{2})k^2(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$	$-\frac{\sqrt{5}(a_{0}-2(c_{1}+c_{2})k^2)}{6(c_{1}+c_{2})k^2(a_{0}-3(c_{1}+c_{2})k^2)}$
$^{1^-}\mathcal{W}_s{}^{\perp h}\dagger^{\alpha}$	0	0	0	$\frac{2ik(3a_{0}^2+a_{0}(a_{0}+2(c_{1}+c_{2}))k^2-(a_{0}(c_{1}-3c_{2})+8(c_{1}+c_{2})^2)k^4+4(c_{1}-2c_{2})(c_{1}+c_{2})k^6)}{\sqrt{3}a_{0}^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2)}$	$\frac{\sqrt{\frac{2}{3}}k^2}{a_{0}(2+k^2)}$	$\frac{-4(2c_{1}-c_{2})(c_{1}+c_{2})k^6(4+k^2)+a_{0}^2k^2(5+2k^2)+4a_{0}k^4(c_{1}-c_{2}(3+k^2))}{\sqrt{3}a_{0}^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2)}$	$(-a_{0}^3(2+k^2)^2+a_{0}^2(c_{1}+c_{2})k^2(4+k^2)(2+3k^2)-4a_{0}(c_{1}+c_{2})k^4(16(c_{1}+c_{2})+6(c_{1}+c_{2})k^2+(c_{1}-3c_{2})k^4)+16(c_{1}+c_{2})^2k^6(8(c_{1}+c_{2})+4(c_{1}+c_{2})k^2+(2c_{1}-c_{2})k^4))/(6\sqrt{2}a_{0}^2(c_{1}+c_{2})k^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2))$	$-\frac{\sqrt{\frac{5}{2}}(a_{0}-4(c_{1}+c_{2})k^2)(a_{0}(2+k^2)+(c_{1}+c_{2})k^2(4+k^2))}{6a_{0}(c_{1}+c_{2})k^2(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$	$-((a_{0}^3(2+k^2)^2-a_{0}^2(c_{1}+c_{2})k^2(80+68k^2+15k^4)+8(c_{1}+c_{2})^2k^6(8(c_{1}+c_{2})+4(c_{1}+c_{2})k^2+(2c_{1}-c_{2})k^4)+4a_{0}(c_{1}+c_{2})k^4(4(c_{1}+c_{2})+6(c_{1}+c_{2})k^2+(c_{1}+3c_{2})k^4))/(6a_{0}^2(c_{1}+c_{2})k^2(2+k^2)^2(a_{0}-3(c_{1}+c_{2})k^2)))$	$-\frac{(a_{0}+2(c_{1}+c_{2})k^2)(a_{0}(2+k^2)+(c_{1}+c_{2})k^2(4+k^2))}{3\sqrt{2}a_{0}(c_{1}+c_{2})k^2(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$
$^{1^-}\mathcal{W}_s{}^{\parallel h}\dagger^{\alpha}$	0	0	0	$-\frac{i\sqrt{\frac{2}{3}}k(a_{0}+2(c_{1}+c_{2})k^2)}{a_{0}(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$	0	$-\frac{k^2(a_{0}+2(c_{1}+c_{2})k^2)}{\sqrt{6}a_{0}(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$	$\frac{4a_{0}(c_{1}+c_{2})k^2-a_{0}^2(2+k^2)+4(c_{1}+c_{2})^2k^4(4+k^2)}{6a_{0}(c_{1}+c_{2})k^2(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$	$-\frac{\sqrt{5}(a_{0}-2(c_{1}+c_{2})k^2)}{6(c_{1}+c_{2})k^2(a_{0}-3(c_{1}+c_{2})k^2)}$	$-\frac{(a_{0}+2(c_{1}+c_{2})k^2)(a_{0}(2+k^2)+(c_{1}+c_{2})k^2(4+k^2))}{3\sqrt{2}a_{0}(c_{1}+c_{2})k^2(2+k^2)(a_{0}-3(c_{1}+c_{2})k^2)}$	$\frac{a_{0}-8(c_{1}+c_{2})k^2}{-3a_{0}(c_{1}+c_{2})k^2+9(c_{1}+c_{2})^2k^4}$

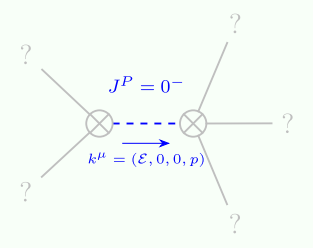
	$^{2^+}\mathcal{T}^{\parallel}{}_{\alpha\beta}$	$^{2^+}\mathcal{W}_a{}^{\parallel}{}_{\alpha\beta}$	$^{2^+}\mathcal{W}_s{}^{\parallel}{}_{\alpha\beta}$	$^{2^+}\mathcal{W}_s{}^{\perp}{}_{\alpha\beta}$	$^{2^-}\mathcal{W}_a{}^{\parallel}{}_{\alpha\beta\chi}$	$^{2^-}\mathcal{W}_s{}^{\parallel}{}_{\alpha\beta\chi}$
$^{2^+}\mathcal{T}^{\parallel}\dagger^{\alpha\beta}$	$-\frac{8(a_{0}+4(-c_{1}+c_{2})k^2)}{a_{0}^2k^2}$	$-\frac{4i\sqrt{2}}{a_{0}k}$	$\frac{4i(a_{0}+4(-c_{1}+c_{2})k^2)}{\sqrt{3}a_{0}^2k}$	$\frac{4i\sqrt{\frac{2}{3}}(a_{0}+4(-c_{1}+c_{2})k^2)}{a_{0}^2k}$	0	0
$^{2^+}\mathcal{W}_a{}^{\parallel}\dagger^{\alpha\beta}$	$\frac{4i\sqrt{2}}{a_{0}k}$	0	$\frac{2\sqrt{\frac{2}{3}}}{a_{0}}$	$\frac{4}{\sqrt{3}a_{0}}$	0	0
$^{2^+}\mathcal{W}_s{}^{\parallel}\dagger^{\alpha\beta}$	$-\frac{4i(a_{0}+4(-c_{1}+c_{2})k^2)}{\sqrt{3}a_{0}^2k}$	$\frac{2\sqrt{\frac{2}{3}}}{a_{0}}$	$-\frac{8(a_{0}-2c_{1}k^2)}{3a_{0}^2}$	$-\frac{2\sqrt{2}(a_{0}-8c_{1}k^2)}{3a_{0}^2}$	0	0
$^{2^+}\mathcal{W}_s{}^{\perp}\dagger^{\alpha\beta}$	$-\frac{4i\sqrt{\frac{2}{3}}(a_{0}+4(-c_{1}+c_{2})k^2)}{a_{0}^2k}$	$\frac{4}{\sqrt{3}a_{0}}$	$-\frac{2\sqrt{2}(a_{0}-8c_{1}k^2)}{3a_{0}^2}$	$\frac{8(a_{0}+4c_{1}k^2)}{3a_{0}^2}$	0	0
$^{2^-}\mathcal{W}_a{}^{\parallel}\dagger^{\alpha\beta\chi}$	0	0	0	0	$\frac{4}{a_{0}+4(-c_{1}+c_{2})k^2}$	0
$^{2^-}\mathcal{W}_s{}^{\parallel}\dagger^{\alpha\beta\chi}$	0	0	0	0	0	$\frac{4}{a_{0}-4(c_{1}+c_{2})k^2}$

	$^{3^-}\mathcal{W}_s{}^{\parallel}{}_{\alpha\beta\chi}$
$^{3^-}\mathcal{W}_s{}^{\parallel}\dagger^{\alpha\beta\chi}$	$-\frac{2}{a_{0}+2(c_{1}+c_{2})k^2}$

Source constraints

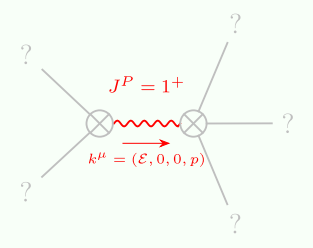
Spin-parity form	Covariant form	Multiplicities
$k\,{}^{0^+}\mathcal{W}_s{}^{\parallel}+2k\,{}^{0^+}\mathcal{W}_s{}^{\perp h}-6i\,{}^{0^+}\mathcal{T}^{\perp}==0$	$2\partial_{\beta}\partial_{\alpha}\mathcal{T}^{\alpha\beta}+\partial_{\chi}\partial^{\chi}\partial_{\alpha}\mathcal{W}^{\alpha\beta}{}_{\beta}==\partial_{\chi}\partial_{\beta}\partial_{\alpha}\mathcal{W}^{\alpha\beta\chi}$	1
$k\,{}^{0^+}\mathcal{W}_s{}^{\perp t}+2i\,{}^{0^+}\mathcal{T}^{\perp}==0$	$2\partial_{\beta}\partial_{\alpha}\mathcal{T}^{\alpha\beta}==\partial_{\chi}\partial_{\beta}\partial_{\alpha}\mathcal{W}^{\alpha\beta\chi}$	1
$k\,{}^{1^-}\mathcal{W}_s{}^{\perp h\alpha}-6i\,{}^{1^-}\mathcal{T}^{\perp\alpha}==k(3\,{}^{1^-}\mathcal{W}_a{}^{\perp\alpha}+{}^{1^-}\mathcal{W}_s{}^{\perp t\alpha})$	$2\partial_{\chi}\partial_{\beta}\partial^{\alpha}\mathcal{T}^{\beta\chi}+\partial_{\delta}\partial^{\delta}\partial_{\chi}\partial_{\beta}\mathcal{W}^{\beta\alpha\chi}==2\partial_{\chi}\partial^{\chi}\partial_{\beta}\mathcal{T}^{\alpha\beta}+\partial_{\delta}\partial_{\chi}\partial_{\beta}\partial^{\alpha}\mathcal{W}^{\beta\chi\delta}$	3
Total expected gauge generators:		5

Massive spectrum



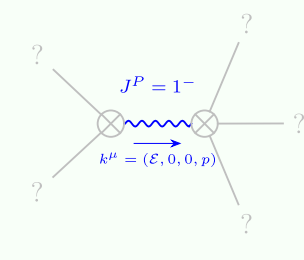
Massive particle

Pole residue:	$\frac{1}{c_{1}-c_{2}}>0$
Square mass:	$-\frac{a_{0}}{2(c_{1}-c_{2})}>0$
Spin:	0
Parity:	Odd



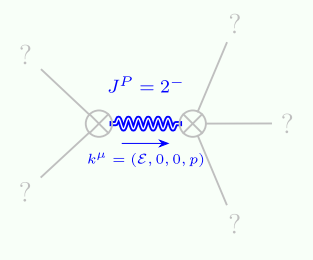
Massive particle

Pole residue:	$-\frac{1}{c_{1}+c_{2}}>0$
Square mass:	$\frac{a_{0}}{4(c_{1}+c_{2})}>0$
Spin:	1
Parity:	Even



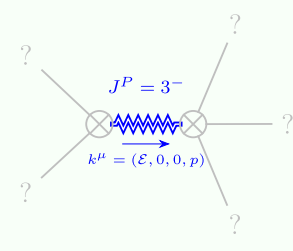
Massive particle

Pole residue:	$\frac{32a_{0}+222(c_{1}+c_{2})}{27(c_{1}+c_{2})(a_{0}+6(c_{1}+c_{2}))}>0$
Square mass:	$\frac{a_{0}}{3(c_{1}+c_{2})}>0$
Spin:	1
Parity:	Odd



Massive particle

Pole residue:	$\frac{1}{c_{1}-c_{2}}>0$
Square mass:	$\frac{a_{0}}{4c_{1}-4c_{2}}>0$
Spin:	2
Parity:	Odd

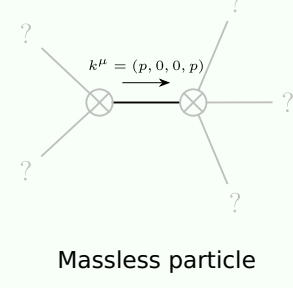


Massive particle

Pole residue:	$\frac{1}{c_{1}+c_{2}}>0$
Square mass:	$-\frac{a_{0}}{2(c_{1}+c_{2})}>0$
Spin:	3
Parity:	Odd

Massless spectrum

`Join[{}, Gather[`



`], {}, {}]`

Massless particle

Pole residue:	(Symmetric → False)⟦1 ;; 1, 2 ;; 2⟧ > 0
Polarisations:	1

Unitarity conditions

Reduce[Join[False, {}], $\{a_{0}, a_{1}, a_{2}, a_{3}, a_{4}, a_{5}, a_{6}, a_{7}, a_{8}, a_{9}, a_{10}, a_{11}, c_{1}, c_{2}, c_{3}, c_{4}, c_{5}, c_{6}, c_{7}, c_{8}, c_{9}, c_{10}, c_{11}, c_{12}, c_{13}, c_{14}, c_{15}, c_{16}\}$]