# **PSALTer results panel**

 $\partial^\chi f^{\alpha\beta} - 8 \beta_1 \partial_\alpha f_{\beta\chi} \partial^\chi f^{\alpha\beta} + 8 \beta_1 \partial_\alpha f_{\beta\chi} \partial^\chi f^{\alpha\beta} - 8 \beta_1 \partial_\alpha f_{\beta\chi} \partial^\chi f^{\alpha\beta} - 4 \beta_1 \partial_\alpha f_{\beta\chi} \partial^\chi f^{\alpha\beta} + 4 \beta_1 \partial_\alpha f_{\beta\chi} \partial^\chi f^{\alpha\beta} - 4 \beta_1 \partial_\alpha f_{\beta\chi} \partial^\chi f^{\alpha\beta} + 4 \beta_1 \partial_\alpha f_{\beta\chi} \partial^\chi f^{\alpha\beta} - 4 \beta_1 \partial_\alpha f_{\beta\chi} \partial^\chi f^{\alpha\beta} + 4 \beta_1 \partial_\alpha f_{\beta\chi} \partial^\chi f^{\alpha\beta} + 4 \beta_1 \partial_\alpha f_{\beta\chi} \partial^\chi f^{\alpha\beta} - 4 \beta_1 \partial_\alpha f_{\beta\chi} \partial^\chi f^{\alpha\beta} \partial^\chi f^{\alpha\beta} - 4 \beta_1 \partial_\alpha f_{\beta\chi} \partial^\chi f^{\alpha\beta} \partial^\chi f^{\alpha\beta} - 4 \beta_1 \partial_\alpha f_{\beta\chi} \partial^\chi f^{\alpha\beta} \partial^\chi f^{\alpha\beta} - 4 \beta_1 \partial_\alpha f_{\beta\chi} \partial^\chi f^{\alpha\beta} \partial^\chi f^$ 

#### **Wave operator**

	${}^{0^+}_{\cdot}\mathcal{F}^{\ }$	$0.^+f^{\parallel}$	$0.^+f^{\perp}$	$0^{-}\mathcal{A}^{\parallel}$										
${}^{0}_{}\mathcal{R}^{\parallel}\dagger$	$\frac{\alpha_0}{2} + \beta_1 + (\alpha_1 + \alpha_1) k^2$	$-\frac{i(\alpha.+2\beta.)}{\sqrt{2}}$	<sup>k</sup> 0	0										
0.+ <i>f</i>    †	$\frac{i(\alpha.+2\beta.)k}{\sqrt{2}}$	$2 \beta_{2} k^{2}$	0	0										
$0.^+f^{\perp}$ †	0	0	0	0										
<sup>0⁻</sup> Æ <sup>∥</sup> †	0	0	0	$\frac{\alpha_{.}}{2}$ + 4 $\beta_{.}$ + ( $\alpha_{.}$ + $\alpha_{.}$ ) $k^{2}$	${}^{1^+_{\cdot}}\mathcal{A}^{\parallel}_{\alpha\beta}$	$^{1^{+}}_{\cdot}\mathcal{H}^{\scriptscriptstyle\perp}{}_{\alpha\beta}$	$1.^+ f \ _{\alpha\beta}$	${}^{1}\mathcal{A}^{\parallel}{}_{lpha}$	$1^{\boldsymbol{\cdot}} \mathscr{F}^{\boldsymbol{\perp}}{}_{\alpha}$	$\frac{1}{2}f^{\parallel}_{\alpha}$	$\frac{1}{2}f_{\alpha}^{\perp}$			
				$^{1.}\mathcal{A}^{\parallel}\dagger^{lphaeta}$	$\frac{\alpha}{4} + \frac{1}{3} (\beta_1 + 8 \beta_1) + (\alpha_2 + \alpha_2) k$	$\frac{3 \alpha4 \beta. +16 \beta.}{6 \sqrt{2}}$	$\frac{i (3 \alpha4 \beta.+16 \beta.) k}{6 \sqrt{2}}$	0	0	0	0			
				$^{1.^{+}}\mathcal{A}^{\scriptscriptstyle \perp}\dagger^{lphaeta}$	$\frac{3\alpha4\beta.+16\beta.}{6\sqrt{2}}$	$\frac{2}{3}(\beta_{1} + 2\beta_{1})$	$\frac{2}{3}i(\beta_{1}+2\beta_{3})k$	0	0	0	0			
				$^{1.}+f^{\parallel}+^{lphaeta}$	$-\frac{i(3\alpha4\beta.+16\beta.)k}{6\sqrt{2}}$	$-\frac{2}{3}i(\beta_1 + 2\beta_3)$	$k \frac{2}{3} (\beta_1 + 2 \beta_1) k^2$	0	0	0	0			
				$^{1}\mathcal{A}^{\parallel}\dagger^{lpha}$	0	0	0	$\frac{\alpha_{\cdot}}{4} + \frac{1}{3} (\beta_{\cdot} + 2 \beta_{\cdot}) + (\alpha_{\cdot} + \alpha_{\cdot}) k^{2}$	$-\frac{3\alpha4\beta.+4\beta.}{6\sqrt{2}}$	0	$-\frac{1}{6}\bar{i}(3\alpha_{.}-4\beta_{.}+4\beta_{.})k$			
				$\frac{1}{2}\mathcal{A}^{\perp} + \alpha$	0	0	0	$-\frac{3\alpha_0 - 4\beta_1 + 4\beta_2}{6\sqrt{2}}$	$\frac{1}{3} (2 \beta_{1} + \beta_{2})$	0	$\frac{1}{3} i \sqrt{2} (2 \beta_1 + \beta_2) k$			
				$\frac{1}{2}f^{\parallel}\uparrow^{\alpha}$	0	0	0	0	0	0	0			
				$\frac{1}{2}f^{\perp}\uparrow^{\alpha}$	0	0	0	$\frac{1}{6}i(3\alpha_{0}-4\beta_{1}+4\beta_{2})k$	$-\frac{1}{3}i\sqrt{2}(2\beta_{1}+\beta_{2})$	k 0	$\frac{2}{3} (2 \beta_{1} + \beta_{2}) k^{2}$	$^{2^{+}}_{\cdot}\mathcal{A}^{\parallel}{}_{lphaeta}$	$2^+_{\cdot}f^{\parallel}_{\alpha\beta}$	$^{2}\mathcal{H}^{\parallel}_{lphaeta\chi}$
											$^{2^{+}}\mathcal{A}^{\parallel}$ $\dagger^{lphaeta}$	$-\frac{\alpha_{.}}{4} + \beta_{.} + (\alpha_{.} + \alpha_{.}) k$	$e^{2} \frac{i(\alpha4\beta.)k}{2\sqrt{2}}$	0
											$2.^{+}f^{\parallel}\uparrow^{\alpha\beta}$	$-\frac{i\left(\alpha4\beta.\right)k}{2\sqrt{2}}$	$2 \beta_{\stackrel{\cdot}{1}} k^2$	0
											$2 \cdot \mathcal{A}^{\parallel} \uparrow^{\alpha\beta\chi}$	0	0	$-\frac{\alpha_{.}}{4} + \beta_{.} + (\alpha_{.} + \alpha_{.}) k^{2}$

### Saturated propagator

	0, <sup>+</sup> σ <sup>∥</sup>	0 <del>.</del> τ∥	$0.^+\tau^{\perp}$	0· σ <sup>  </sup>
<sup>0,+</sup> σ <sup>  </sup> †	$-\frac{4 \beta_{.2}}{\alpha_{.0}^{2}+2 \alpha_{.0} \beta_{.2}-4 (\alpha_{.}+\alpha_{.}) \beta_{.2} k^{2}}$	$\frac{i \sqrt{2} (\alpha_0 + 2\beta_1)}{-\alpha_0 (\alpha_0 + 2\beta_1) k + 4 (\alpha_1 + \alpha_0) \beta_1 k^3}$	0	0
<sup>0,+</sup> τ <sup>  </sup> †	$i \sqrt{2} (\alpha. + 2 \beta.)$	$\frac{\alpha. + 2 (\beta. + (\alpha. + \alpha.) k^2)}{-\alpha. (\alpha. + 2 \beta.) k^2 + 4 (\alpha. + \alpha.) \beta. k^4}$	0	0
$0.^{+}\tau^{\perp}$ †	0	0	0	0
º̄σ"†	0	0	0	$\frac{2}{\alpha_{.}+8\beta_{.}+2(\alpha_{.}+\alpha_{.})k^{2}}$

$\frac{2}{(\alpha_{\cdot}+\alpha_{\cdot})k^2}$	$\overset{1^{+}}{\cdot}\sigma^{\parallel}{}_{\alpha\beta}$	$\overset{1^{+}}{\cdot}\sigma^{^{\perp}}{}_{\alpha\beta}$	$1^+_{.}\tau^{\parallel}{}_{\alpha\beta}$	$\frac{1}{2} \sigma^{\parallel}_{\alpha}$	$\overset{1}{\cdot}\sigma^{\perp}_{\alpha}$	$1^{-}\tau^{\parallel}_{\alpha}$	$1^{\cdot}\tau^{\perp}{}_{\alpha}$
$^{1.^{+}}\sigma^{\parallel}$ † $^{lphaeta}$	$\frac{1}{-\frac{\frac{3(\alpha4\beta.)(\alpha.+8\beta.)}{0}(\alpha.+8\beta.)}{16(\beta.+2\beta.)} + (\alpha.+\alpha.)k^2}$	$-\frac{2\sqrt{2}(3\alpha_{.0}-4\beta_{.1}+16\beta_{.3})}{(1+k^{2})(-3(\alpha_{.0}-4\beta_{.1})(\alpha_{.0}+8\beta_{.3})+16(\alpha_{.2}+\alpha_{.5})(\beta_{.1}+2\beta_{.3})k^{2})}$	$-\frac{2 i \sqrt{2} (3 \alpha_{0}^{-4} \beta_{1}^{+16} \beta_{3}^{+}) k}{(1+k^{2}) (-3 (\alpha_{0}^{-4} \beta_{1}^{+}) (\alpha_{0}^{+8} \beta_{3}^{+}) + 16 (\alpha_{2}^{+} + \alpha_{5}^{+}) (\beta_{1}^{+2} + 2 \beta_{3}^{+}) k^{2})}$	0	0	0	0
$1.^+\sigma^{\perp}$ †	$-\frac{2\sqrt{2}(3\alpha_{.0}-4\beta_{\dot{1}}+16\beta_{.)}}{(1+k^2)(-3(\alpha_{.0}-4\beta_{\dot{1}})(\alpha_{.0}+8\beta_{.)})+16(\alpha_{.2}+\alpha_{.0})(\beta_{\dot{1}}+2\beta_{.)}k^2)}$	$\frac{6\alpha.+8(\beta.+8\beta.+3(\alpha.+\alpha.)k^2)}{(1+k^2)^2(-3(\alpha4\beta.1)(\alpha.+8\beta.)+16(\alpha.+\alpha.1)(\beta.+2\beta.1)k^2)}$	$\frac{6 i \alpha. k + 8 i k (\beta_1 + 8 \beta. + 3 (\alpha. + \alpha_5) k^2)}{(1 + k^2)^2 (-3 (\alpha 4 \beta_1) (\alpha. + 8 \beta.) + 16 (\alpha. + \alpha_5) (\beta_1 + 2 \beta.) k^2)}$	0	0	0	0
$1.^+ \tau^{\parallel} + ^{\alpha\beta}$	$\frac{2 i \sqrt{2} (3 \alpha_{.}^{-4} \beta_{.}^{+} + 16 \beta_{.}^{-}) k}{(1+k^{2}) (-3 (\alpha_{.}^{-4} \beta_{.}^{+}) (\alpha_{.}^{-} + 8 \beta_{.}^{-}) + 16 (\alpha_{.}^{-} + \alpha_{.}^{-}) (\beta_{.}^{-} + 2 \beta_{.}^{-}) k^{2})}$	$\frac{ -6i\alpha.k - 8ik(\beta. + 8\beta. + 3(\alpha. + \alpha.)k^2)}{(1 + k^2)^2(- 3(\alpha 4\beta.)(\alpha. + 8\beta.) + 16(\alpha. + \alpha.)(\beta. + 2\beta.)k^2)}$	$\frac{2 k^2 (3 \alpha.+4 (\beta.+8 \beta.+3 (\alpha.+\alpha.) k^2))}{(1+k^2)^2 (-3 (\alpha4 \beta.) (\alpha.+8 \beta.) +16 (\alpha.+\alpha.) (\beta.+2 \beta.) k^2)}$	0	0	0	0
$\dot{\sigma}^{\parallel} \dot{\sigma}^{\parallel}$	0	0	0	$-\frac{1}{\frac{3(\alpha_{.}-4\beta_{.})(\alpha_{.}+2\beta_{.})}{8(2\beta_{.}+\beta_{.})}} + (\alpha_{.}+\alpha_{.})k^{2}$	$\frac{2 \sqrt{2} (3 \alpha_{.0} - 4 \beta_{1} + 4 \beta_{.2})}{(1 + 2 k^{2}) (-3 (\alpha_{.0} - 4 \beta_{1}) (\alpha_{.0} + 2 \beta_{.2}) + 8 (\alpha_{.4} + \alpha_{.5}) (2 \beta_{1} + \beta_{.2}) k^{2})}$	0	$\frac{4 i (3 \alpha_{.} - 4 \beta_{.} + 4 \beta_{.}) k}{(1 + 2 k^{2}) (-3 (\alpha_{.} - 4 \beta_{.}) (\alpha_{.} + 2 \beta_{.}) + 8 (\alpha_{.} + \alpha_{.}) (2 \beta_{.} + \beta_{.}) k^{2})}$
$\frac{1}{2}\sigma^{\perp} + \alpha$	0	0	0	$\frac{2 \sqrt{2} (3 \alpha_{0}^{-4} \beta_{1}^{+4} \beta_{2}^{+})}{(1+2 k^{2}) (-3 (\alpha_{0}^{-4} \beta_{1}^{+}) (\alpha_{0}^{+2} \beta_{2}^{+}) + 8 (\alpha_{4}^{+} + \alpha_{5}^{+}) (2 \beta_{1}^{+} + \beta_{2}^{+}) k^{2})}$	$\frac{6\alpha.+8(\beta_{1}+2\beta_{2}+3(\alpha_{4}+\alpha_{5})k^{2})}{(1+2k^{2})^{2}(-3(\alpha_{0}-4\beta_{1})(\alpha_{0}+2\beta_{2})+8(\alpha_{4}+\alpha_{5})(2\beta_{1}+\beta_{2})k^{2})}$	0	$\frac{2 i \sqrt{2} k (3 \alpha_{0} + 4 (\beta_{1} + 2 \beta_{2} + 3 (\alpha_{4} + \alpha_{5}) k^{2}))}{(1 + 2 k^{2})^{2} (-3 (\alpha_{0} - 4 \beta_{1}) (\alpha_{0} + 2 \beta_{2}) + 8 (\alpha_{4} + \alpha_{5}) (2 \beta_{1} + \beta_{2}) k^{2})}$
$\dot{\tau}^{\parallel} \tau^{\parallel} + \alpha$	0	0	0	0	0	0	0
$\dot{\tau}^{\perp} \tau^{\perp} \uparrow^{\alpha}$	0	0	0	$-\frac{4 i (3 \alpha_{0}-4 \beta_{1}+4 \beta_{2}) k}{(1+2 k^{2}) (-3 (\alpha_{0}-4 \beta_{1}) (\alpha_{0}+2 \beta_{2})+8 (\alpha_{1}+\alpha_{2}) (2 \beta_{1}+\beta_{2}) k^{2})}$	$-\frac{2 i \sqrt{2} k (3 \alpha_{.}+4 (\beta_{.}+2 \beta_{.}+3 (\alpha_{.}+\alpha_{.}) k^{2}))}{(1+2 k^{2})^{2} (-3 (\alpha_{.}-4 \beta_{.}) (\alpha_{.}+2 \beta_{.})+8 (\alpha_{.}+\alpha_{.}) (2 \beta_{.}+\beta_{.}) k^{2})}$	, O	$\frac{4 k^2 (3 \alpha. +4 (\beta. +2 \beta. +3 (\alpha. +\alpha.) k^2))}{(1+2 k^2)^2 (-3 (\alpha4 \beta.) (\alpha. +2 \beta.) +8 (\alpha. +\alpha.) (2 \beta. +\beta.) k^2)}$

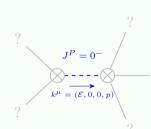
5			
$(1+\alpha.)(2\beta.+\beta.)k^2$	$^{2.}^{+}\sigma^{\parallel}{}_{lphaeta}$	$2^+_{\tau}$	$2 \sigma^{\parallel}_{\alpha\beta\chi}$
$^{2.^{+}}\sigma^{\parallel}$ † $^{^{lphaeta}}$	$\frac{16 \beta_{1}}{-\alpha_{0}^{2}+4 \alpha_{0} \beta_{1}+16 (\alpha_{1}+\alpha_{4}) \beta_{1} k^{2}}$	$\frac{2 i \sqrt{2} (\alpha_{0} - 4 \beta_{1})}{\alpha_{0} (\alpha_{0} - 4 \beta_{1}) k - 16 (\alpha_{1} + \alpha_{1}) \beta_{1} k^{3}}$	0
$2.^{+}\tau^{\parallel} \uparrow^{\alpha\beta}$	$\frac{2i\sqrt{2}(\alpha_{0}-4\beta_{1})}{-\alpha_{0}(\alpha_{0}-4\beta_{1})k+16(\alpha_{1}+\alpha_{4})\beta_{1}k^{3}}$	$\frac{2 \left(\alpha - 4 \beta - 4 \left(\alpha + \alpha \right) k^{2}\right)}{\alpha \cdot \left(\alpha - 4 \beta - k^{2}\right) k^{2} - 16 \left(\alpha + \alpha - k^{2}\right) \beta \cdot k^{4}}$	0
$2^{-}\sigma^{\parallel} \uparrow^{\alpha\beta\chi}$		0	$\frac{1}{\frac{\alpha_{\cdot}}{-\frac{0}{4}+\beta_{\cdot}+(\alpha_{\cdot}+\alpha_{\cdot})k}}$

### **Source constraints**

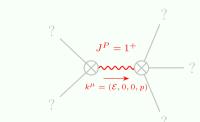
Spin-parity form	Covariant form	Multiplicities
$0^{+}_{\cdot} \tau^{\perp} == 0$	$\partial_{\beta}\partial_{\alpha}\tau\left(\Delta+\mathcal{K}\right)^{\alpha\beta}==0$	1
0,+ r <sup>1</sup> == 0	$\partial_{\beta}\partial_{\alpha}\tau \left(\Delta + \mathcal{K}\right)^{\alpha\beta} == 0$	1
$2 i k \cdot 1 \sigma^{\perp \alpha} + 1 \tau^{\perp \alpha} = 0$	$\partial_{\chi}\partial_{\beta}\partial^{\alpha}\tau \left(\Delta + \mathcal{K}\right)^{\beta\chi} = \partial_{\chi}\partial^{\chi}\partial_{\beta}\tau \left(\Delta + \mathcal{K}\right)^{\alpha\beta} + 2\partial_{\delta}\partial^{\delta}\partial_{\chi}\partial_{\beta}\sigma^{\beta\alpha\chi}$	3
$\frac{1}{1} \tau^{\parallel^{\alpha}} == 0$	$\partial_{\chi}\partial_{\beta}\partial^{\alpha}\tau\left(\Delta+\mathcal{K}\right)^{\beta\chi}==\partial_{\chi}\partial^{\chi}\partial_{\beta}\tau\left(\Delta+\mathcal{K}\right)^{\beta\alpha}$	3
$\bar{i}  k  \stackrel{1^+}{\cdot} \sigma^{\perp}^{\alpha\beta} + \stackrel{1^+}{\cdot} \tau^{\parallel}^{\alpha\beta} =$	$0 \partial_{\chi}\partial^{\alpha}\tau(\Delta+\mathcal{K})^{\beta\chi} + \partial_{\chi}\partial^{\beta}\tau(\Delta+\mathcal{K})^{\chi\alpha} + \partial_{\chi}\partial^{\chi}\tau(\Delta+\mathcal{K})^{\alpha\beta} + 2\partial_{\delta}\partial_{\chi}\partial^{\alpha}\sigma^{\chi\beta\delta} + 2\partial_{\delta}\partial^{\delta}\partial_{\chi}\sigma^{\chi\alpha\beta} = \partial_{\chi}\partial^{\alpha}\tau(\Delta+\mathcal{K})^{\chi\beta} + \partial_{\chi}\partial^{\beta}\tau(\Delta+\mathcal{K})^{\alpha\chi} + \partial_{\chi}\partial^{\chi}\tau(\Delta+\mathcal{K})^{\beta\alpha} + 2\partial_{\delta}\partial_{\chi}\partial^{\beta}\sigma^{\chi\alpha\delta} = \partial_{\chi}\partial^{\alpha}\tau(\Delta+\mathcal{K})^{\chi\beta} + \partial_{\chi}\partial^{\beta}\tau(\Delta+\mathcal{K})^{\alpha\chi} + \partial_{\chi}\partial^{\chi}\tau(\Delta+\mathcal{K})^{\alpha\beta} + \partial_{\chi}\partial^{\chi}\tau(\Delta+\mathcal{K})^$	3
Total expected gauge generators:		

Massive spectrum

Mass	ive particle
	$\frac{1}{\frac{1}{\alpha_{0}}} + \frac{\frac{\alpha_{0} + \alpha_{0} + 2\beta_{0}}{\frac{4}{6}\beta_{0} + 2\alpha_{0}\beta_{0}}}{\frac{2}{2}\frac{\alpha_{0}\beta_{0} + 2\alpha_{0}\beta_{0}}{\frac{4}{2}\beta_{0}}} >$
Square mass:	$\frac{\frac{\alpha.(\alpha.+2\beta.)}{\frac{0}{4}(\alpha.+\alpha.)\beta.}}{\frac{4(\alpha.+\alpha.)\beta.}{462}} > 0$
Spin:	0



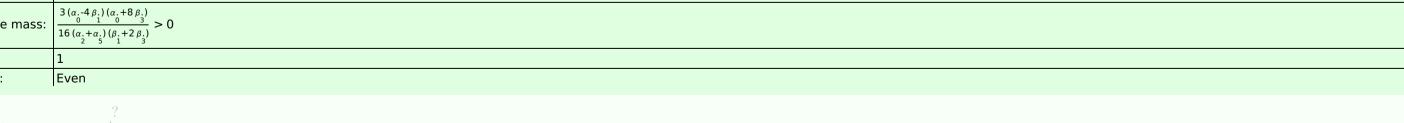
Massive <sub>I</sub>	
Pole residue:	$-\frac{1}{\frac{\alpha_{\cdot}+\alpha_{\cdot}}{2}}>0$
Square mass:	$-\frac{\frac{\alpha.+8\beta.}{0}}{\frac{2(\alpha.+\alpha.)}{2}} > 0$
Spin:	0
Parity:	Odd





Pole residue:	$ (3 (\alpha_{0}^{2} (3 \alpha_{0} + 3 \alpha_{0} + 2 \beta_{0} + 4 \beta_{0}) - 8 \alpha_{0}^{2} (\beta_{0}^{2} + \alpha_{0}^{2} (\beta_{0} - 4 \beta_{0}) + \alpha_{0}^{2} (\beta_{0}^{2} - 4 \beta_{0}) + \alpha_{0}^{2} (\beta_{0}^{2} + 2 \beta_{0}^{2}) + 16 (-4 \beta_{0}^{2} \beta_{0}^{2} (\beta_{0}^{2} + 2 \beta_{0}^{2}) + \alpha_{0}^{2} (\beta_{0}^{2} + 2 \beta_{0}^{2}) ))) / (2 (\alpha_{0}^{2} + \alpha_{0}^{2} (\beta_{0}^{2} + 2 \beta_{0}^{2}) + 16 (\alpha_{0}^{2} \beta_{0}^{2} - 2 \beta_{0}^{2}) + \alpha_{0}^{2} (\beta_{0}^{2} - 2 $
Square mass:	$\frac{\frac{3(\alpha_{\cdot}-4\beta_{\cdot})(\alpha_{\cdot}+8\beta_{\cdot})}{16(\alpha_{\cdot}+\alpha_{\cdot})(\beta_{\cdot}+2\beta_{\cdot})}}{16(\alpha_{\cdot}+\alpha_{\cdot})(\beta_{\cdot}+2\beta_{\cdot})} > 0$
Spin:	1

	Mussive particle
Pole residue:	$-((3(\alpha_{0}^{2}(3\alpha_{0}^{2}+3\alpha_{0}^{2}+4\beta_{0}^{2}+2\beta_{0}^{2})+4\alpha_{0}^{2}(-2\alpha_{0}^{2}\beta_{0}^{2}-2\alpha_{0}^{2}\beta_{0}^{2}-2\alpha_{0}^{2}\beta_{0}^{2}+2\alpha_{0}^{2}\beta_{0}^{2}+2\alpha_{0}^{2}\beta_{0}^{2}+\beta_{0}^{2})+8(-2\beta_{0}^{2}\beta_{0}^{2}+\beta_{0}^{2})+\alpha_{0}^{2}(2\beta_{0}^{2}+\beta_{0}^{2}))))/(2(\alpha_{0}^{2}+\alpha_{0}^{2})(-2\beta_{0}^{2}+\beta_{0}^{2})+\alpha_{0}^{2}(-2\beta_{0}^{2}+\beta_{0}^{2})+\alpha_{0}^{2}(-2\beta_{0}^{2}+\beta_{0}^{2})+\alpha_{0}^{2}(-2\beta_{0}^{2}+\beta_{0}^{2}))))/(2(\alpha_{0}^{2}+\alpha_{0}^{2})(-2\beta_{0}^{2}+\beta_{0}^{2})+\alpha_{0}^{2}(-2\beta_{0}^{2}+\beta_{0}^{2}+\beta_{0}^{2})+\alpha_{0}^{2}(-2\beta_{0}^{2}+\beta_{0}^{2})+\alpha_{0}^{2}(-2\beta_{0}^{2}+\beta_{0}^{2})+\alpha_$
Square mass:	$\frac{\frac{3(\alpha_{0}-4\beta_{0})(\alpha_{0}+2\beta_{0})}{\frac{8(\alpha_{0}+\alpha_{0})(2\beta_{1}+\beta_{0})}{\frac{4}{5}(2\beta_{1}+\beta_{0})}}}{8(\alpha_{0}+\alpha_{0})(2\beta_{1}+\beta_{0})}>0$
Spin:	
D	

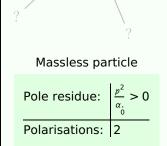


?
? /
$J^P=2^-$
?
$k^{\mu} = (\mathcal{E}, 0, 0, p)$
?
9

	*
Massive p	particle
Pole residue:	$-\frac{1}{\alpha_1 + \alpha_2} > 0$
Square mass:	$\frac{\frac{\alpha4\beta.}{0}}{\frac{4(\alpha.+\alpha.)}{1}} > 0$
Spin:	2
Parity:	Odd

## Massless spectrum

Massive particle



**Unitarity conditions** 

(Demonstrably impossible)