1 #1	$7^{1}\alpha$	0	0	0	0	0	0	0	0	0	0
	$\Delta_{1}^{-1}\alpha$	0	0	0	0	0	$-\frac{1}{6a_0}$	$\frac{\sqrt{5}}{6a_0}$	$-\frac{7}{3\sqrt{2}a_0}$	340	0
V #2	$\Delta_{1}^{-1} \alpha$	0	0	0	0	0	$-\frac{1}{6\sqrt{2} a_0}$	$-\frac{\sqrt{\frac{5}{2}}}{6a_0}$	17 <u>6</u>	$-\frac{7}{3\sqrt{2}a_0}$	0
*	$\Delta_{1}^{-1} \alpha$	0	0	0	0	0	$\frac{5\sqrt{5}}{12a_0}$	$\frac{1}{12 a_0}$	$-\frac{\sqrt{\frac{5}{2}}}{6a_0}$	$-\frac{\sqrt{5}}{6a_0}$	0
	Δ_{1}^{-} α	0	0	0	0	0	$-\frac{19}{12 a_0}$	$\frac{5\sqrt{5}}{12a_0}$	$-\frac{1}{6\sqrt{2}a_0}$	$-\frac{1}{6a_0}$	0
v #2	Δ_{1}^{-}	0	0	0	$\frac{2\sqrt{2}}{a_0}$	$\frac{2}{a_0}$	0	0	0	0	0
v #1	Δ_{1}^{-}	0	0	0	0	$\frac{2\sqrt{2}}{a_0}$	0	0	0	0	0
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	$\alpha_1 + \alpha \beta$	0	0	$\frac{4}{a_0}$	0	0	0	0	0	0	0
V #2	$\Delta_1^+ \alpha \beta$	$-\frac{2\sqrt{2}}{a_0}$	2 40	0	0	0	0	0	0	0	0
	$\Delta_1^+ \alpha \beta$	0	$\frac{2\sqrt{2}}{a_0}$	0	0	0	0	0	0	0	0
		$\Delta_1^{\#_1} +^{\alpha\beta}$	$\Delta_1^{\#_2} + \alpha^{\beta}$	$\Delta_1^{\#3} + ^{\alpha \beta}$	$\Delta_{1}^{\#1} +^{\alpha}$	$\Delta_1^{#2} + \alpha$	$\Delta_{1}^{\#3} +^{\alpha}$	$\Delta_{1^{\bar{-}}}^{\#4} +^{\alpha}$	$\Delta_{1}^{\#5} {\dagger}^{\alpha}$	$\Delta_1^{\#6} \dagger^{\alpha}$	${\mathcal T}_{1}^{\#1} {\dagger}^{\alpha}$

z, Γ	~	$\frac{\pi}{1} + \alpha \beta$	$\frac{1}{1}$ α	1- α	$1^{-}\alpha$	$1^{1-\alpha}$	$1^{-1}\alpha$	Ι 1- α	''1 ⁻ α
4 4 -	$\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0	0	0	0
$\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0	0	0	0	0
0	0	<u>a0</u> 4	0	0	0	0	0	0	0
0	0	0	- <u>a0</u> 4	$\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0
0	0	0	$\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0	0
0	0	0	0	0	- a 0	$\frac{\sqrt{5} a_0}{6}$	$-\frac{a_0}{6\sqrt{2}}$	$\frac{9}{60}$	0
0	0	0	0	0	$\frac{\sqrt{5} a_0}{6}$	8 0p	$-\frac{1}{6}\sqrt{\frac{5}{2}}a_0$	$-\frac{\sqrt{5} a_0}{6}$	0
0	0	0	0	0	$-\frac{a_0}{6\sqrt{2}}$	$-\frac{1}{6}\sqrt{\frac{5}{2}}a_0$	<u>a0</u> 3	$\frac{a_0}{6\sqrt{2}}$	0
0	0	0	0	0	$-\frac{a_0}{6}$	$-\frac{\sqrt{5} a_0}{6}$	$\frac{a_0}{6\sqrt{2}}$	$\frac{5a_0}{12}$	0
0	0	0	0	0	0	0	0	0	0

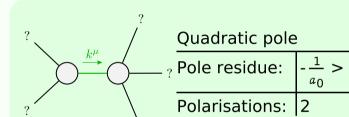
	-χ ₂	$\frac{1}{2} a_0 \Gamma^{\alpha\beta\chi} \partial_\beta h_{\alpha\chi} - \frac{1}{4} a_0 \Gamma^\alpha_{\ \alpha} \partial_\beta h^\chi_{\ \chi} + \frac{1}{4} a_0 \Gamma^{\alpha\beta}_{\ \alpha} \partial_\beta h^\chi_{\ \chi} - \frac{1}{4} a_0 h^\chi_{\ \chi} \partial_\beta \Gamma^\alpha_{\ \alpha} h^\gamma_{\ \chi} \partial_\beta h^\gamma_{\ \alpha} + \frac{1}{4} a_0 h^\gamma_{\ \chi} \partial_\beta h^\gamma_{\ \chi} + \frac{1}{4} a_0 h^\gamma_{\ \chi} \partial_$	$\frac{1}{4} a_0 \ h^{\chi}_{\ \chi} \ \partial_{\beta} \Gamma^{\alpha\beta}_{\ \alpha} - \frac{1}{2} a_0 \ h_{\alpha\chi} \ \partial_{\beta} \Gamma^{\alpha\beta\chi} + \frac{1}{2} a_0 \ h^{\alpha\beta} \ \partial_{\beta} \partial_{\alpha} h^{\chi}_{\ \chi} - \frac{1}{8} a_0 \ \partial_{\beta} h^{\chi}_{\ \chi} \partial^{\beta} h^{\beta}_{\ \chi}$	$rac{1}{2} a_0 \Gamma^{lpha \ eta} \partial_\chi h_{eta}^{\ X} - rac{1}{2} a_0 \partial_lpha h^{lpha eta} \partial_\chi h_{eta}^{\ X} + rac{1}{2} a_0 \partial^eta h^lpha \partial_\chi h_{eta}^{\ X} - a_0 \ h^{lpha eta} \partial_\chi \partial_eta h_{lpha}^{\ X}$				$\Delta_{3^-}^{\#1} +^{\alpha\beta\chi}$
	Δ_{α}	$\frac{1}{4}a$	-I 8	(- a 0	$^{1}\beta$	β	<u></u>	
	$-\alpha\beta\chi$	χ^{\prime}_{\times}	$^{\chi}\mu_{^{\chi}}$	$\langle h_{\beta}^{\lambda} \rangle$	$\chi_{\mathcal{O}_{\chi}}$	ز لـ م	Δ_0^*	0
	$1 + \theta^{\kappa}$	$\beta_{\alpha} \partial_{\beta'}$	$^{\beta}$ $^{\beta}$	$h^{\alpha}_{\alpha}\partial_{\rho}$	$h^{\alpha}_{\alpha} \partial$	$i_{eta_X} \partial_X$	$\mathcal{T}_0^{\#2}$	0
	$\alpha \beta \mathcal{T}_{\epsilon}$	$a_0 \Gamma^{\alpha}$	$a_0 h^{\alpha}$	$a_0 \partial^{\beta}$	$\frac{1}{4} a_0$	$\frac{1}{2}a_0$	${\mathcal T}_{0}^{\#1}$	0
	$\Gamma^{\chi}_{\beta\chi} + \mu$	$_{\beta}h_{\chi}^{\chi} + \frac{1}{4}$	$\Gamma^{\alpha\beta\chi} + \frac{1}{2}$	$3_{\chi}h_{\beta}^{\chi} + \frac{1}{2}$	$\partial_{\chi}\partial^{\chi}h_{\alpha\beta}$ -	$_{3}$ $\partial^{\chi} h^{\alpha \beta} +$	$\Delta_{0}^{\#4}$	0
>-	$-\frac{1}{2} a_0 \Gamma^{\alpha\beta\chi} \Gamma_{\beta\chi\alpha} + \frac{1}{2} a_0 \Gamma^{\alpha}{}^{\beta} \Gamma^{\chi}{}_{\beta\chi} + h^{\alpha\beta} \mathcal{T}_{\alpha\beta} + \Gamma^{\alpha\beta\chi} \Delta_{\alpha\beta\chi} -$	$a_0 \stackrel{\alpha}{\vdash}^{\alpha} b$	$a_0 h_{\alpha\chi} \partial_{eta}$	$a_0 \partial_{\alpha} h^{\alpha \beta} i$	$\frac{1}{4} a_0 h^{\alpha}_{\alpha} \partial_{\chi} \partial_{\beta} h^{\beta \chi} + \frac{1}{2} a_0 h^{\alpha \beta} \partial_{\chi} \partial^{\chi} h_{\alpha \beta} - \frac{1}{4} a_0 h^{\alpha}_{\alpha} \partial_{\chi} \partial^{\chi} h^{\beta}_{\beta} -$	$\frac{1}{4} a_0 \partial_\beta h_{\alpha\chi} \partial^\chi h^{\alpha\beta} + \frac{3}{8} a_0 \partial_\chi h_{\alpha\beta} \partial^\chi h^{\alpha\beta} + \frac{1}{2} a_0 h_{\beta\chi} \partial^\chi \Gamma^{\alpha \beta}_{\alpha}$	$\Delta_{0}^{\#1} \Delta_{0}^{\#2} \Delta_{0}^{\#3} \Delta_{0}^{\#4} \mathcal{T}_{0}^{\#1} \mathcal{T}_{0}^{\#2} \Delta_{0}^{\#1}$	$\Delta_0^{\#1} + \begin{bmatrix} -\frac{2}{a_0} & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 &$
Lagrangian density	$\Gamma_{\beta\chi\alpha} + \frac{1}{2}$	$\beta h_{\alpha \chi}^{-\frac{1}{4}}$	$\Gamma^{\alpha\beta} - \frac{1}{2}$	$_{\chi}h_{\beta}^{\chi}-\frac{1}{2}$	$\theta_{\beta}h^{\beta\chi}$ +	$+ \mu_{\alpha\beta} + \frac{1}{8}$	$\Delta_0^{\#2}$	0
angiaı	$L^{\alpha eta \chi}$	$\vdash_{\alpha\beta\chi} g$	h_{χ}^{χ} ∂_{β}	$\Gamma^{\alpha}_{\alpha}^{\beta}$	$\eta^{\alpha}_{\alpha} \partial_{\chi}$	$^{\beta}$ $^{\mu}$ $^{\alpha}$ $^{\dot{\alpha}}$	$\Delta_0^{\#1}$	- 2
Lagra	$-\frac{1}{2}a_{0}$	$\frac{1}{2}a_0$	$\frac{1}{4}a_0$	$\frac{1}{2}a_0$	$\frac{1}{4}a_0$	$\frac{1}{4}a_0\dot{c}$		$\Delta_0^{#1}$ †

	0	0	0	0	0	0	$-\frac{2}{a_0}$	$\Delta_{2}^{#2}$	0	0	0	0	0	$\frac{4}{a_0}$
	0	0	0	0	0	0	0	$\alpha eta_{\chi} \Delta$						
	0	0	0	0	$\frac{4}{a_0 k^2}$	0	0	$\Delta_{2^{-}}^{\#1}$	0	0	0	0	$\frac{4}{a_0}$	0
,	0	$\frac{1}{2\sqrt{2}a_0}$	$-\frac{1}{2\sqrt{2}a_0}$	$\frac{1}{2a_0}$	0	0	0	$3 \mathcal{T}_{2}^{\#1} \alpha \beta$	0	0	0	$-\frac{8}{a_0 k^2}$	0	0
,	0	5 4 a 0	$-\frac{3}{4 a_0}$	$-\frac{1}{2\sqrt{2}a_0}$	0	0	0	$\alpha \beta \ \Delta_{2}^{\#3} + \alpha \beta$	0	0	4 40	0	0	0
,	0	$-\frac{3}{4a_0}$	5 4 a 0	$-\frac{1}{2\sqrt{2}}a_0$	0	0	0	$\Delta_2^{\#1}_{+\alpha\beta} \; \Delta_2^{\#2}_{+}$	$\frac{4}{a_0}$ 0	$0 -\frac{2}{a_0}$	0 0	0 0	0 0	0 0
	$-\frac{2}{a_0}$	0	0	0	0	0	0	<	$+\alpha\beta$	$+^{\alpha\beta}$	$+^{\alpha\beta}$	$\alpha\beta$	χχ	Χβ;
	$\Delta_{0}^{\#1} \uparrow$	$\Delta_{0}^{#2} +$	$\Delta_{0}^{#3}$ †	$\Delta_{0}^{#4}$ †	${\cal T}_{0}^{\#1}$ †	$\mathcal{T}_{0}^{\#2}$ †	$\Delta_{0^-}^{\#1} \uparrow$		$\Delta_2^{#1}$ †	$\Delta_{2}^{#2} \dagger$	$\Delta_{2}^{#3}$ †	$\mathcal{T}_{2}^{\#1} \dagger^{\alpha\beta}$	$\Delta_{2^{-}}^{\#1} \dagger^{\alpha\beta\chi}$	$\Delta_{2}^{#2} + ^{\alpha \beta \chi}$

Source constraints	
SO(3) irreps	#
$\mathcal{T}_{0^{+}}^{\#2} == 0$	1
$\Delta_{0^{+}}^{\#3} + 2 \Delta_{0^{+}}^{\#4} + 3 \Delta_{0^{+}}^{\#2} == 0$	1
$\mathcal{T}_{1}^{\#1\alpha} == 0$	3
$\frac{2 \Delta_{1}^{\#6\alpha} + \Delta_{1}^{\#4\alpha} + 2 \Delta_{1}^{\#5\alpha} + \Delta_{1}^{\#3\alpha} == 0}{2 \Delta_{1}^{\#6\alpha} + \Delta_{1}^{\#3\alpha} == 0}$	3
Total #:	8

$\Gamma_{2^{-}}^{\#2}{}_{\alphaeta\chi}$	0	0	0	0	0	$\frac{a_0}{4}$	
$\Gamma_{2}^{\#1}_{\alpha eta \chi}$	0	0	0	0	<u>4</u>	0	
$h_2^{\#1}$	0	0	0	$-\frac{a_0 k^2}{8}$	0	0	
$\Gamma_{2}^{\#3}$	0	0	$\frac{a_0}{4}$	0	0	0	
$\Gamma_{2}^{\#2}$	0	$-\frac{a_0}{2}$	0	0	0	0	
$\Gamma_{2}^{\#1}$	<u>4</u>	0	0	0	0	0	
	$\Gamma_2^{#1} + \alpha \beta$	$\Gamma_2^{\#2} + \alpha \beta$	$\Gamma_2^{#3} + \alpha \beta$	$h_2^{#1} + \alpha \beta$	$\Gamma_{2}^{#1} +^{\alpha\beta\chi}$	$\Gamma_{2}^{#2} + \alpha \beta \chi$	

	$\Gamma_0^{\#1}$	$\Gamma_{0}^{\#2}$	Γ ₀ ^{#3}	$\Gamma_{0}^{\#4}$	$h_0^{\#1}$	$h_{0}^{#2}$	Γ ₀ -
^{#1} ₀ + †	$-\frac{a_0}{2}$	0	0	0	0	0	0
-#2 0+ †	0	0	<u>a₀</u> 2	$-\frac{a_0}{2\sqrt{2}}$	0	0	0
-#3 0+ †	0	<u>a₀</u> 2	0	$-\frac{a_0}{2\sqrt{2}}$	0	0	0
-#4 0+ †	0	$-\frac{a_0}{2\sqrt{2}}$	$-\frac{a_0}{2\sqrt{2}}$	<u>a₀</u> 2	0	0	0
v ₀ ^{#1} †	0	0	0	0	$\frac{a_0 k^2}{4}$	0	0
n ^{#2} †	0	0	0	0	0	0	0
^{-#1} †	0	0	0	0	0	0	$-\frac{a_0}{2}$



(No massive particles)

$\frac{\text{Unitarity conditions}}{a_0 < 0}$