

	$\Gamma_{1}^{\#1}{}_{\alpha\beta}$	$\Gamma_{1}^{\#2}{}_{\alpha\beta}$	$\Gamma_{1}^{\#3}{}_{\alpha\beta}$	$\Gamma_{1}^{\#1}{}_{\alpha}$	$\Gamma_{1}^{\#2}{}_{\alpha}$	Γ ₁ -α	$\Gamma_{1}^{\#4}$ α	$\Gamma_{1^{-}\alpha}^{\#5}$	$\Gamma_{1}^{\#6}{}_{lpha}$	$h_{1}^{\#1}\alpha$
$\Gamma_{1}^{\#1} \dagger^{\alpha\beta}$	$-\frac{a_0}{4}$	$-\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0	0	0	0
$\Gamma_{1}^{#2} \dagger^{\alpha\beta}$	$-\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0	0	0	0	0
$\Gamma_{1}^{#3} \dagger^{\alpha\beta}$	0	0	<u>a₀</u> 4	0	0	0	0	0	0	0
$\Gamma_{1}^{#1} + \alpha$	0	0	0	$-\frac{a_0}{4}$	$\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0
$\Gamma_1^{#2} + \alpha$	0	0	0	$\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0	0
$\Gamma_{1}^{#3} \dagger^{\alpha}$	0	0	0	0	0	- <u>a_0</u> 3	$\frac{\sqrt{5} a_0}{6}$	$-\frac{a_0}{6\sqrt{2}}$	- <u>a_0</u> 6	0
$\Gamma_{1}^{#4} + \alpha$	0	0	0	0	0	$\frac{\sqrt{5} \ a_0}{6}$	<u>a₀</u> 3	$-\frac{1}{6}\sqrt{\frac{5}{2}}a_0$	$-\frac{\sqrt{5} a_0}{6}$	0
$\Gamma_{1}^{#5} \dagger^{\alpha}$	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
$\Gamma_{1}^{#6} \dagger^{\alpha}$	0	0	0	0	0	- <u>a o</u> 6	$-\frac{\sqrt{5} \ a_0}{6}$	$\frac{a_0}{6\sqrt{2}}$	5 <i>a</i> ₀ 12	0
$h_{1}^{#1} \dagger^{\alpha}$	0	0	0	0	0	0	0	0	0	0

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$\Delta_{0^{\text{-}}}^{\#1}$	0	0	0	0	0	0	$-\frac{2}{a_0}$
$\mathcal{T}_{0}^{\#2}$	0	0	0	0	0	0	0
$\mathcal{T}_{0}^{\#1}$	0	0	0	0	$\frac{4}{a_0 k^2}$	0	0
$\Delta_{0}^{\#4}$	0	$-\frac{1}{2\sqrt{2}}a_0$	$-\frac{1}{2\sqrt{2}a_0}$	$\frac{1}{2a_0}$	0	0	0
$\Delta_{0}^{\#3}$	0	$\frac{5}{4 a_0}$	$-\frac{3}{4 a_0}$	$-\frac{1}{2\sqrt{2}a_0}$	0	0	0
$\Delta_{0}^{\#2}$	0	$-\frac{3}{4 a_0}$	$\frac{5}{4a_0}$	$-\frac{1}{2\sqrt{2}a_0}$	0	0	0
$\Delta_{0}^{\#1}$	$-\frac{2}{a_0}$	0	0	0	0	0	0
	$\Delta_0^{\#1}$ †	$\Delta_{0}^{#2}$ †	$\Delta_{0}^{#3}$ †	$\Delta_{0}^{\#4}$ †	${\mathcal T}_{0}^{\#1}$ †	${\cal T}_{0}^{\#2}$ †	$\Delta_{0^{\text{-}}}^{\#1}\dagger$

	#	1	1	3	:= 0 3	8
			($^{\alpha}+\ \Delta_{1}^{\#3}{}^{\alpha}$:	
aints			$3 \Delta_{0}^{#2} == 0$		$^{\chi}$ +2 $\Delta_{1}^{\#5}$	
Source constraints	SO(3) irreps	$T_{0+}^{#2} == 0$	$\Delta_{0+}^{\#3} + 2 \Delta_{0+}^{\#4} + 3 \Delta_{0+}^{\#2} == 0$	0 == _σ .	$2 \Delta_{1}^{\#6\alpha} + \Delta_{1}^{\#4\alpha} + 2 \Delta_{1}^{\#5\alpha} + \Delta_{1}^{\#3\alpha} == 0 \bigg 3$:# ۴
Soul	20($\mathcal{T}_{0}^{\#2}$	$\Delta_0^{#3}$	${\mathcal T}_{1}^{\#1}{}^{lpha}$:	$2 \Delta_1^{\sharp}$	Total #

	$\Gamma_{2}^{\#1}_{\alpha\beta}$	$\Gamma_{2}^{\#2}{}_{\alpha\beta}$	$\Gamma_{2}^{\#3}_{\alpha\beta}$	$h_{2}^{\#1}{}_{lphaeta}$	$\Gamma_{2}^{\#1}_{\alpha\beta\chi}$	$\Gamma_{2}^{\#2}_{\alpha\beta\chi}$
$\Gamma_{2}^{\#1} \dagger^{\alpha\beta}$	<u>a₀</u> 4	0	0	0	0	0
$\Gamma_{2}^{\#2} \dagger^{\alpha\beta}$	0	$-\frac{a_0}{2}$	0	0	0	0
$\Gamma_{2}^{#3} \dagger^{\alpha\beta}$	0	0	<u>a₀</u> 4	0	0	0
$h_{2}^{\#1} \dagger^{\alpha\beta}$	0	0	0	$-\frac{a_0 k^2}{8}$	0	0
$\Gamma_2^{#1} + \alpha \beta \chi$	0	0	0	0	<u>a₀</u> 4	0
$\Gamma_2^{\#2} \dagger^{\alpha\beta\chi}$	0	0	0	0	0	<u>a₀</u> 4

${\mathcal T}_{1^{-}}^{\#1}{}_{\alpha}$	0	0	0	0	0	0	0	0	0	0
$\Delta_{1^{\bar{-}}\alpha}^{\#6}$	0	0	0	0	0	$-\frac{1}{6a_0}$	$-\frac{\sqrt{5}}{6a_0}$	$-\frac{7}{3\sqrt{2}a_0}$	3 a 0	0
$\Delta_{1}^{\#5}{}_{\alpha}$	0	0	0	0	0	$-\frac{1}{6\sqrt{2}a_0}$	$-\frac{\sqrt{\frac{5}{2}}}{6a_0}$	17 6 a 0	$-\frac{7}{3\sqrt{2}a_0}$	0
$\Delta_{1}^{\#4}{}_{\alpha}$	0	0	0	0	0	$\frac{5\sqrt{5}}{12a_0}$	$\frac{1}{12a_0}$	$-\frac{\sqrt{\frac{5}{2}}}{6a_0}$	$-\frac{\sqrt{5}}{6a_0}$	0
$\Delta_{1}^{\#3}$	0	0	0	0	0	$-\frac{19}{12a_0}$	$\frac{5\sqrt{5}}{12a_0}$	$-\frac{1}{6\sqrt{2}a_0}$	$-\frac{1}{6a_0}$	0
$\Delta_{1}^{\#2}{}_{\alpha}$	0	0	0	$\frac{2\sqrt{2}}{a_0}$	$\frac{2}{a_0}$	0	0	0	0	0
$\Delta_{1^{\text{-}}}^{\#1}{}_{\alpha}$	0	0	0	0	$\frac{2\sqrt{2}}{a_0}$	0	0	0	0	0
$\Delta_{1}^{\#3}{}_{+}\alpha\beta$	0	0	$\frac{4}{a_0}$	0	0	0	0	0	0	0
$\Delta_1^{\#2}$	$-\frac{2\sqrt{2}}{a_0}$	$\frac{2}{a_0}$	0	0	0	0	0	0	0	0
$\Delta_{1}^{\#1}$ $\alpha \beta$	0	$\frac{2\sqrt{2}}{a_0}$	0	0	0	0	0	0	0	0
	$\Delta_1^{\#1} + ^{lphaeta}$	$\Delta_{1}^{#2} + \alpha \beta$	$\Delta_1^{\#3} \dagger^{\alpha \beta}$	$\Delta_{1}^{\#1} +^{\alpha}$	$\Delta_1^{\#2} +^{\alpha}$	$\Delta_{1}^{\#3} +^{lpha}$	$\Delta_1^{\#4} +^{lpha}$	$\Delta_1^{\#5} +^{lpha}$	$\Delta_{1}^{\#6} +^{\alpha}$	$\mathcal{T}_{1^{\bar{-}}}^{\#1} +^{\alpha}$

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	$\beta_{\beta}h_{\chi}^{\chi}$ -	$\alpha \beta \alpha \lambda \lambda + \alpha \beta \lambda \lambda \lambda + \alpha \beta \lambda \lambda$	$\partial_{\beta}h_{\alpha}^{\ X} + \partial_{\chi}\partial^{\chi}h_{\beta}^{\beta} - \partial_{\chi}\partial^{\chi}h_{\beta}^{\beta}$	α	$\Delta_{2}^{#2}$	0	0	0	0	0	4
	$\frac{1}{2}a_0 \Gamma^{\alpha\beta\chi} \Gamma_{\beta\chi\alpha} + \frac{1}{2}a_0 \Gamma^{\alpha}_{\ \alpha}^{\ \beta} \Gamma^{\chi}_{\ \beta\chi} - \frac{1}{2}a_0 \Gamma^{\alpha\beta\chi} \partial_{\beta}h_{\alpha\chi} - \frac{1}{4}a_0 \Gamma^{\alpha}_{\ \alpha}^{\ \beta} \partial_{\beta}h_{\chi}^{\chi} + \frac{1}{4}a_0 \Gamma^{\alpha\beta}_{\ \alpha} \partial_{\beta}h_{\chi}^{\chi} + \frac{1}{4$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\frac{1}{2}a_0 \partial_{\alpha}h^{\alpha\beta} \partial_{\chi}h_{\beta}^{\ X} + \frac{1}{2}a_0 \partial^{\beta}h_{\alpha}^{\ \alpha} \partial_{\chi}h_{\beta}^{\ X} - a_0 h^{\alpha\beta} \partial_{\chi}\partial_{\beta}h_{\alpha}^{\ X} +$ $\frac{1}{4}a_0 h_{\alpha}^{\ \alpha} \partial_{\chi}\partial_{\beta}h^{\beta\chi} + \frac{1}{2}a_0 h^{\alpha\beta} \partial_{\chi}\partial^{\chi}h_{\alpha\beta} - \frac{1}{4}a_0 h^{\alpha} \partial_{\chi}\partial^{\chi}h^{\beta}$ $\frac{1}{4}a_0 \partial_{\alpha}h_{\alpha}^{\ \alpha} \partial_{\chi}\partial_{\beta}h^{\beta} + \frac{1}{2}a_0 \partial_{\alpha}h_{\alpha}^{\ \beta} \partial_{\chi}h^{\alpha\beta} + \frac{1}{4}a_0 h_{\alpha}^{\ \beta} \partial_{\chi}h^{\alpha}$	$X \Delta_{\alpha\beta\chi}$	$\Delta^{\#1}_{\gamma+\alpha_R} \Delta^{\#2}_{\gamma+\alpha_R} \Delta^{\#3}_{\gamma+\alpha_R} \mathcal{T}^{\#1}_{\gamma+\alpha_R} \Delta^{\#1}_{\gamma-\alpha_N} \Delta^{\#2}_{\gamma-\alpha_N}$	0	0	0	0	4 0 0	(
	1 8 4 9	$\frac{\alpha}{\alpha} = \frac{1}{2}i$ $\frac{\beta}{\alpha} + \frac{1}{2}i$	$3xh_{\beta}^{X}-a_{\beta}$ $3xh_{\alpha\beta}^{X}-a_{\beta}$	$^{\eta} + L^{\alpha\beta}$	7#1	0	0	0	$-\frac{8}{a_0 k^2}$	0	•
	$\begin{bmatrix} \Gamma^{\alpha} & \beta & \Gamma \\ \alpha & \alpha & \partial \beta I \end{bmatrix}$	$h^{\lambda}_{X} \sigma_{\beta}$ $\sigma_{\beta} h^{X}_{X} \sigma_{\beta}$	$\frac{\partial^{\mu}h^{\alpha}}{\partial h^{\alpha}}$	hab To	$\Delta_{2}^{#3}$	0	0	4 0 0	0	0	,
nsity	$+\frac{1}{2}a_0$ $-\frac{1}{4}a_0$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$(+ \frac{1}{2} a_0)$ $(+ \frac{1}{2} a_0)$ $(+ \frac{1}{2} a_0)$ $(+ \frac{1}{2} a_0)$	s term:	$\Delta_{2}^{#2}$	0	- 2 a ₀	0	0	0	,
ian de	$\frac{6x}{6x} \Gamma_{\beta \chi \alpha}$ $\frac{x}{2} \partial_{\beta} h_{\alpha \chi}$	$\frac{\partial_{eta}\Gamma^{\alpha}}{\partial_{eta}\partial_{lpha}h^{X}}$	$\partial_{\chi} \partial_{\chi} h_{\beta}^{\chi}$ $\partial_{\chi} \partial_{\beta} h^{\beta}$ $\partial_{\chi} \partial_{\gamma} h_{\alpha} f_{\gamma}$	ource .	$\Delta_{2}^{\#1}_{+\alpha\beta}$		0	0	0	0	(
Lagrangian density	$\frac{1}{2}a_0 \Gamma^{\alpha\beta\chi} \Gamma_{\beta\chi\alpha} + \frac{1}{2}a_0 \Gamma^{\alpha}_{\alpha} \Gamma^{\chi}_{\gamma}$ $\frac{1}{2}a_0 \Gamma^{\alpha\beta\chi} \partial_{\beta}h_{\alpha\chi} - \frac{1}{4}a_0 \Gamma^{\alpha}_{\alpha} \beta_{\beta}h^{\chi}$ $\frac{1}{2}a_0 \Gamma^{\alpha}_{\alpha} \beta_{\beta}h^{\chi}_{\gamma} - \frac{1}{4}a_0 \Gamma^{\alpha}_{\alpha} \beta_{\beta}h^{\chi}_{\gamma}$	$rac{1}{4}a_0\ h^{\lambda_X}\partial_{eta}\Gamma^{\alpha}{}^{\alpha} + rac{1}{4}a_0\ h^{\lambda_X}\partial_{eta}\Gamma^{\mu}{}^{\alpha} - rac{1}{2}a_0\ h_{lpha_X}c$ $rac{1}{2}a_0\ h^{lpha_X}\partial_{eta}h^{\chi} + rac{1}{2}a_0\ \Gamma^{lpha}$	$\begin{bmatrix} a_0 \partial_{\alpha} h \\ a_0 h^{\alpha} \end{bmatrix}$	Added source term: $h^{\alpha\beta} \mathcal{T}_{\alpha\beta} + \Gamma^{\alpha\beta\chi} \Delta_{\alpha\beta\chi}$		$\Delta_{2}^{#1} + ^{\alpha \beta}$	$\Delta_2^{#2} + \alpha^{\beta}$	$\Delta_2^{#3} + \alpha \beta$	$\mathcal{T}_{2}^{\#1} \dagger^{\alpha\beta}$	$\Delta_{2}^{#1} + ^{\alpha \beta \chi}$	x8ν. c#
	1 1 112 11	14 410 -	11 12 11 14 11	41 d		7	7	7	7	۵	

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

?		
$?$ k^{μ}	Quadratic pole	:
?	Pole residue:	$-\frac{1}{a_0} > 0$
?	Polarisations:	2
?		

Unitarity conditions $a_0 < 0$

(No massive particles)