

	$\phi_{0^+}^{\#1}$	$\mathcal{A}_{0^+}^{\#1}$	$\mathcal{B}_{0^+}^{\#1}$	$C_{0^+}^{\#1}$
$\phi_{0^+}^{\#1} \dagger$	$\zeta + k^2 \delta$	$\frac{i k \epsilon}{2}$	0	0
$\mathcal{A}_{0^+}^{\#1} \dagger$	$-\frac{1}{2} i k \epsilon$	$k^2 \alpha$	0	0
$\mathcal{B}_{0^+}^{\#1} \dagger$	0	0	0	0
$C_{0^+}^{\#1} \dagger$	0	0	0	$\mathcal{A}_{1^- \alpha}^{\#1}$ $\mathcal{B}_{1^- \alpha}^{\#1}$ $C_{1^- \alpha}^{\#1}$
		$\mathcal{A}_{1^- \alpha}^{\#1} \dagger^\alpha$	0	0
		$\mathcal{B}_{1^- \alpha}^{\#1} \dagger^\alpha$	0	$k^2 \beta$
		$C_{1^- \alpha}^{\#1} \dagger^\alpha$	0	$\frac{k^2 \gamma}{2}$

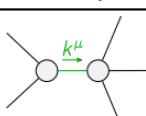
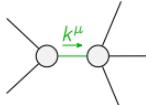
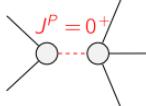
	$\rho_{0^+}^{\#1}$	$\mathcal{T}_{0^+}^{\#1}$	$\mathcal{K}_{0^+}^{\#1}$	$\mathcal{K}_{0^+}^{\#1}$
$\rho_{0^+}^{\#1} \dagger$	$\frac{k^2 \alpha}{\text{Det}(0^+)}$	$-\frac{i k \epsilon}{2 \text{Det}(0^+)}$	0	0
$\mathcal{T}_{0^+}^{\#1} \dagger$	$\frac{i k \epsilon}{2 \text{Det}(0^+)}$	$\frac{\zeta + k^2 \delta}{\text{Det}(0^+)}$	0	0
$\mathcal{K}_{0^+}^{\#1} \dagger$	0	0	0	0
$\mathcal{K}_{0^+}^{\#1} \dagger$	0	0	0	$\mathcal{T}_{1^- \alpha}^{\#1}$ $\mathcal{K}_{1^- \alpha}^{\#1}$ $\mathcal{K}_{1^- \alpha}^{\#1}$
		$\mathcal{T}_{1^- \alpha}^{\#1} \dagger^\alpha$	0	0
		$\mathcal{K}_{1^- \alpha}^{\#1} \dagger^\alpha$	0	$\frac{k^2 \delta}{\text{Det}(1^-)}$ $-\frac{k^2 \gamma}{2 \text{Det}(1^-)}$
		$\mathcal{K}_{1^- \alpha}^{\#1} \dagger^\alpha$	0	$-\frac{k^2 \gamma}{2 \text{Det}(1^-)}$ $\frac{k^2 \beta}{\text{Det}(1^-)}$

Abbreviations used in matrices

$$\text{Det}(0^+) == \frac{1}{4} k^2 (-\epsilon^2 + 4 \alpha (\zeta + k^2 \delta)) \quad \& \quad \text{Det}(1^-) == \frac{1}{4} k^4 (4 \delta \beta - \gamma^2)$$

Lagrangian

$$\zeta \phi^2 + \epsilon \phi \partial_\alpha \mathcal{A}^\alpha + \delta \partial_\alpha \phi \partial^\alpha \phi + \beta \partial_\alpha \mathcal{B}_\beta \partial^\alpha \mathcal{B}^\beta + \gamma \partial_\alpha \mathcal{B}_\beta \partial^\alpha C^\beta + \delta \partial_\alpha C_\beta \partial^\alpha C^\beta + \alpha \partial_\alpha \mathcal{A}^\alpha \partial_\beta \mathcal{A}^\beta - \beta \partial_\alpha \mathcal{B}_\beta \partial^\beta \mathcal{B}^\alpha - \gamma \partial_\alpha \mathcal{B}_\beta \partial^\beta C^\alpha - \delta \partial_\alpha C_\beta \partial^\beta C^\alpha$$

Added source term(s):	$\phi \rho + \mathcal{A}^\alpha \mathcal{T}_\alpha + \mathcal{B}^\alpha \mathcal{K}_\alpha + C^\alpha \mathcal{K}_\alpha$		
Source constraint(s)	# constraint(s)		Covariant form
$\mathcal{K}_{0^+}^{\#1} == 0$	1		$\partial_\alpha \mathcal{K}^\alpha == 0$
$\mathcal{K}_{0^+}^{\#1} == 0$	1		$\partial_\alpha \mathcal{K}^\alpha == 0$
$\mathcal{T}_{1^- \alpha}^{\#1} == 0$	3		$\partial_\beta \partial^\alpha \mathcal{T}^\beta == \partial_\beta \partial^\beta \mathcal{T}^\alpha$
Total # constraint(s):	5		
Resolved pole(s)	# polarization(s)	Square mass	Residue
	2	0	$-\frac{\delta + \beta + \sqrt{\delta^2 - 2 \delta \beta + \beta^2 + \gamma^2}}{4 \delta \beta - \gamma^2}$
	2	0	$-\frac{\delta + \beta - \sqrt{\delta^2 - 2 \delta \beta + \beta^2 + \gamma^2}}{4 \delta \beta - \gamma^2}$
	1	$\frac{\epsilon^2 - 4 \alpha \zeta}{4 \alpha \delta}$	$\frac{\alpha \epsilon^2 - 4 \alpha^2 \zeta + \epsilon^2 \delta}{\alpha \epsilon^2 \delta - 4 \alpha^2 \zeta \delta}$
Resolved unitarity condition(s):	(Demonstrably impossible)		