

Lagrangian density

$$\gamma \mathcal{B}_\alpha \mathcal{B}^\alpha + \beta \partial_\alpha \mathcal{B}^\alpha \partial_\beta \mathcal{B}^\beta + \alpha \partial_\beta \mathcal{B}_\alpha \partial^\beta \mathcal{B}^\alpha$$

Added source term: $\mathcal{B}^\alpha \mathcal{J}_\alpha$

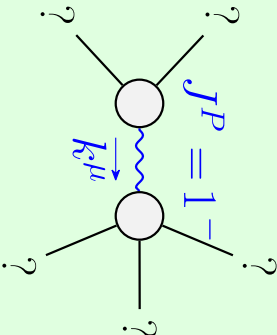
(No source constraints)

$$\mathcal{B}_{0+}^{\#1} + \boxed{\gamma + (\alpha + \beta) k^2} \mathcal{B}_{0+}^{\#1}$$

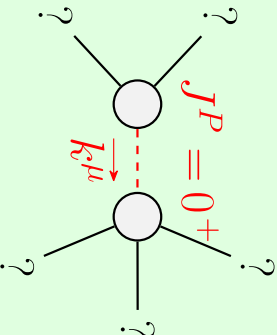
$$\mathcal{J}_{0+}^{\#1} + \boxed{\frac{1}{\gamma + (\alpha + \beta) k^2}} \mathcal{J}_{0+}^{\#1}$$

$$\mathcal{B}_{1-}^{\#1} + \alpha \boxed{\gamma + \alpha k^2} \mathcal{B}_{1-}^{\#1}$$

$$\mathcal{J}_{1-}^{\#1} + \alpha \boxed{\frac{1}{\gamma + \alpha k^2}} \mathcal{J}_{1-}^{\#1}$$



Massive particle	
Pole residue:	$-\frac{1}{\alpha} > 0$
Polarisations:	3
Square mass:	$-\frac{\gamma}{\alpha} > 0$
Spin:	1
Parity:	Odd



Massive particle	
Pole residue:	$\frac{1}{\alpha + \beta} > 0$
Polarisations:	1
Square mass:	$-\frac{\gamma}{\alpha + \beta} > 0$
Spin:	0
Parity:	Even

Unitarity conditions
(Unitarity is demonstrably impossible)

(No massless particles)