

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:  $\mathcal{B}^\alpha \mathcal{J}_\alpha$

$$\mathcal{B}_{0+}^{\#1}$$

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

$$\mathcal{J}_{0+}^{\#1}$$

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

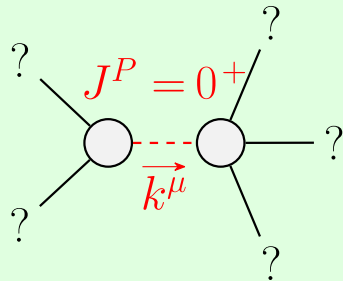
$$\mathcal{B}_{1-}^{\#1}{}_\alpha$$

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

$$\mathcal{J}_{1-}^{\#1}{}_\alpha$$

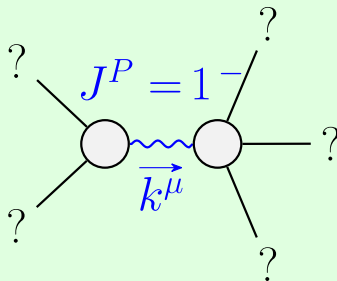
$$\mathcal{J}_{1-}^{\#1} \dagger^\alpha \boxed{\frac{1}{\gamma + \alpha k^2}}$$

(No source constraints)



Massive particle

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



Massive particle

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

Unitarity conditions

(Unitarity is demonstrably impossible)

(No massless particles)