

Lagrangian density

$$-2 \alpha \partial_\alpha \mathcal{B}_\beta \partial^\beta \mathcal{B}^\alpha + 2 \alpha \partial_\beta \mathcal{B}_\alpha \partial^\beta \mathcal{B}^\alpha$$

Added source term:  $\left| \mathcal{B}^\alpha \mathcal{J}_\alpha \right.$

Source constraints

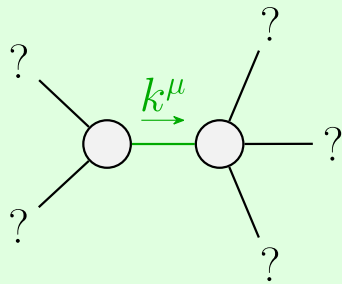
SO(3) irreps	#
$\mathcal{J}_{0+}^{\#1} == 0$	1
Total #:	1

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

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

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

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



Quadratic pole

Pole residue:  $-\frac{1}{\alpha} > 0$

Polarisations: 2

$\alpha < 0$  | Unitarity conditions

(No massive particles)