

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

## Source constraints

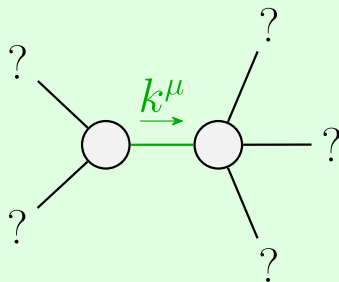
SO(3) irreps	#
$\mathcal{J}_{0^+}^{\#1} == 0$	1
Total #:	1

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

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

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

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



Quadratic pole

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

Polarisations: 2

Unitarity conditions  
 $\alpha < 0$

(No massive particles)