

Lagrangian density

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

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

$$\mathcal{J}_1^{\#1} + \alpha \left[\frac{1}{\alpha k^2} \right]$$

$$\mathcal{B}_1^{\#1} + \alpha \left[\alpha k^2 \right]$$

(No source constraints)

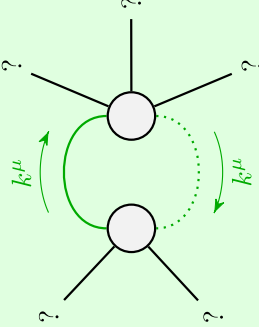
$$\mathcal{B}_0^{\#1} + \left[(\alpha + \beta) k^2 \right]$$

$$\mathcal{J}_0^{\#1} + \left[\frac{1}{(\alpha + \beta) k^2} \right]$$

(No massive particles)

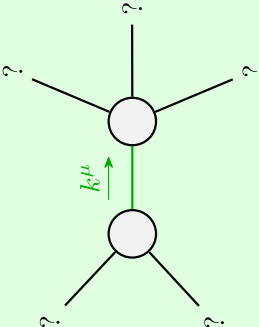
Unitarity conditions

(Unitarity is demonstrably impossible)



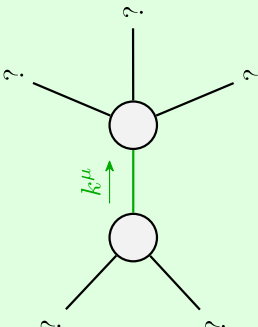
Quartic pole

Pole residue:	$0 < -\frac{\beta}{\alpha(\alpha+\beta)} \&\& -\frac{\beta}{\alpha(\alpha+\beta)} > 0$
Polarisations:	1



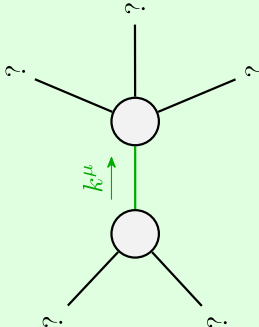
Quadratic pole

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



Quadratic pole

Pole residue:	$-\frac{1}{\alpha} > 0$
Polarisations:	2



Quadratic pole

Pole residue:	$\frac{1}{\alpha} + \frac{1}{\alpha+\beta} > 0$
Polarisations:	1