

Lagrangian density

$$\alpha \partial_\alpha \phi \partial^\alpha \phi$$

Added source term:  $\phi \rho$

$$\rho_{0+}^{\#1} +$$

$$\boxed{\frac{1}{\alpha k^2}}$$

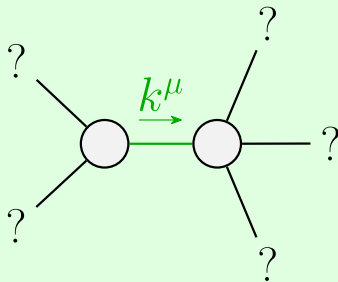
$$\rho_{0+}^{\#1}$$

$$\phi_{0+}^{\#1} +$$

$$\boxed{\alpha k^2}$$

$$\phi_{0+}^{\#1}$$

(No source constraints)



Quadratic pole

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

Polarisations: 1

Unitarity conditions  
 $\alpha > 0$

(No massive particles)