

Lagrangian density

$$-\beta \phi^2 + \alpha \partial_\alpha \phi \partial^\alpha \phi$$

Added source term:  $|\phi \rho$

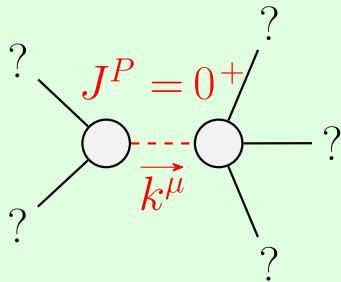
$$\phi_{0+}^{\#1}$$

$$\phi_{0+}^{\#1} \dagger \boxed{-\beta + \alpha k^2}$$

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

$$\rho_{0+}^{\#1} \dagger \boxed{\frac{1}{-\beta + \alpha k^2}}$$

(No source constraints)



Massive particle

Pole residue:	$\frac{1}{\alpha} > 0$
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Polarisations:	1
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Square mass:	$\frac{\beta}{\alpha} > 0$
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Spin:	0
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Parity:	Even
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$\alpha > 0 \ \&\& \ \beta > 0$	Unitarity conditions
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(No massless particles)