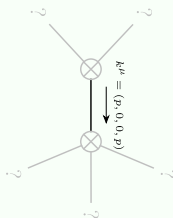


## Wave operator and propagator

[illegible]

$$S = \iiint (h^{\alpha\beta} \tau_{\alpha\beta} - \beta \delta h^\alpha_a \partial_\chi h^\chi_\beta + \frac{1}{2} \alpha (\partial_\beta h^\chi_\chi \partial^\beta h^\alpha_a - 2 \partial_\alpha h^{\alpha\beta} \partial_\chi h^\chi_\beta - \partial_\chi h_{\alpha\beta} \partial^\chi h^{\alpha\beta})) [t, x, y, z] d^4 z d^4 y d^4 x$$

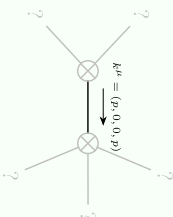
## Massive and massless spectra



## Massless particle

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

(No particles)



### Massless particle

Poleresidue:	$\frac{4+(\alpha-\beta)^2}{\alpha(\alpha-\beta)(\alpha+3\beta)} > 0$
Polarisations:	1

## Unitarity conditions