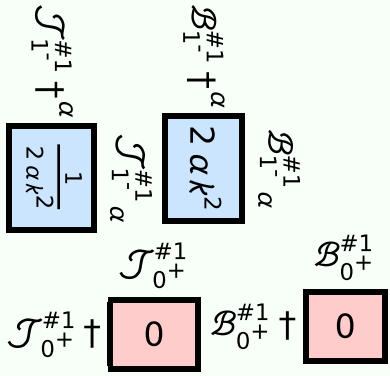
Particle spectrograph

Wave operator and propagator

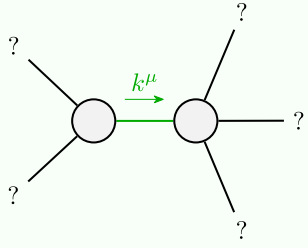
Quadratic (free) action

$$S == \int\int\int\int (\mathcal{B}^{\alpha}\ \mathcal{T}_{\alpha} + 2\,\alpha\,(-\partial_{\alpha}\mathcal{B}_{\beta} + \partial_{\beta}\mathcal{B}_{\alpha})\,\partial^{\beta}\mathcal{B}^{\alpha})[t, x, y, z]\,dz\,dy\,dx\,dt$$

Source constraints/gauge generators	
SO(3) irreps	Multiplicities
$\mathcal{T}^{\#1}_{0^+} == 0$	1
Total constraints:	1



Massive and massless spectra



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

(No massive particles)

Unitarity conditions

$\alpha < 0$