

PSALTer results panel

Wave operator and propagator

$$S = \iiint (\mathcal{M} \mathcal{B}_{\alpha\beta} \mathcal{B}^{\alpha\beta} + \mathcal{B}^{\alpha\beta} \mathcal{J}_{\alpha\beta} + \frac{1}{3} \alpha (-2 \partial_\beta \mathcal{B}_{\alpha\chi} + \partial_\chi \mathcal{B}_{\alpha\beta}) \partial^\chi \mathcal{B}^{\alpha\beta}) [t, x, y, z] d^4x$$

	$\begin{matrix} \#1 \\ 1^+ \end{matrix} \mathcal{J}_{\alpha\beta}$	$\begin{matrix} \#1 \\ 1^- \end{matrix} \mathcal{J}_\alpha$	$\begin{matrix} \#1 \\ 1^+ \end{matrix} \mathcal{B}_{\alpha\beta}$	$\begin{matrix} \#1 \\ 1^- \end{matrix} \mathcal{B}_\alpha$	(No source constraints)
$\begin{matrix} \#1 \\ 1^+ \end{matrix} \mathcal{J}^{\alpha\beta}$	$\frac{1}{\frac{k^2 \alpha}{3} + \mathcal{M}}$	0	$\frac{k^2 \alpha}{3} + \mathcal{M}$	0	
$\begin{matrix} \#1 \\ 1^- \end{matrix} \mathcal{J}^\alpha$	0	$\frac{1}{\mathcal{M}}$	0	\mathcal{M}	

Massive and massless spectra

Poleresidue:	$\frac{3}{\alpha} > 0$
Square mass:	$\frac{3\mathcal{M}}{\alpha} > 0$
Spin:	0
Parity:	Even

Massive particle

$J^P = 0^+$
 $k^\mu = (E, 0, 0, p)$

(No particles)

Unitarity conditions

