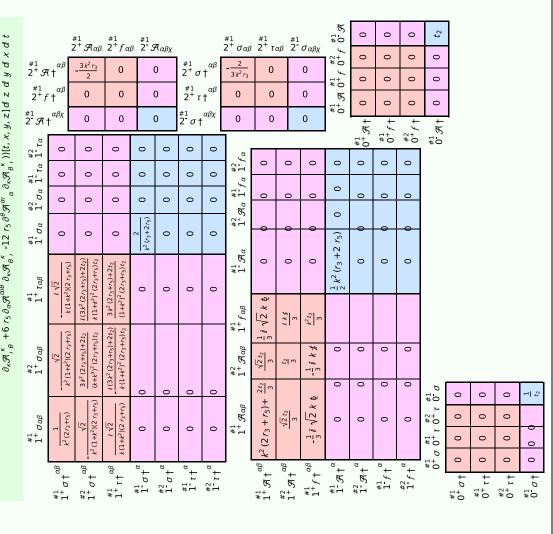
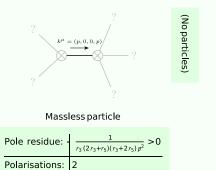
Particle spectrograph

Wave operator and propagator

Spin-parity form Co	ariant form	Multiplicities	
$0^{+1} \sigma == 0$	$\partial_{\beta}\sigma^{\alpha\beta}_{\alpha} = 0$	1	$\begin{array}{c} \left(\partial_{\theta} \mathcal{A}_{\beta} \right)^{\theta} + 6 r_{3} \\ \mathcal{A}_{\theta \alpha} \partial^{\theta} f^{\alpha t} + \\ \left(\partial^{\theta} f^{\alpha t} - \partial^{\theta} f^{\alpha t} \right) \\ \left(\partial^{\theta} \partial^{\theta} \mathcal{A}^{\alpha t} \right) \\ \left(\partial^{\theta} \partial^{\theta} \mathcal{A}^{\alpha t} \right) \\ \mathcal{A}_{\theta} \mathcal{A}_{\theta} $
# ¹ 0 ⁺ τ ==0	$\partial_{\beta}\partial_{\alpha}\tau^{\alpha\beta} == \partial_{\beta}\partial^{\beta}\tau^{\alpha}{}_{\alpha}$	1	$^{-3} Y_3 \partial_{\alpha} \mathcal{A}^{\alpha\beta} \partial_{\theta} \mathcal{A}_{\beta}^{\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
#2 0 ⁺ τ ==0	$\partial_{\beta}\partial_{\alpha}\tau^{\alpha\beta} == 0$	1	$r_3 \partial_i \mathcal{A}_{\beta \ \theta}^{\ \theta} \partial^i \mathcal{A}^{\alpha \beta}_{\ \alpha} - 3 \ r_3 \partial_{\alpha} \mathcal{A}^{\alpha \beta i} \partial_{\theta} \mathcal{A}_{\beta}^{\ i} + 4 \ t_2 \ \mathcal{A}_{i \partial \alpha}^{\ i} \partial^{\beta}_{\ i} \partial^{\beta}_{$
$\frac{^{\#2}}{1} \tau^{\alpha} == 0$	$\partial_{\chi}\partial_{\beta}\partial^{\alpha}\tau^{\beta\chi} == \partial_{\chi}\partial^{\chi}\partial_{\beta}\tau^{\alpha\beta}$	3	3 r ₃ 0 9 + 1 9 f ^α - 24 r 1 (^k + 1 c)
$1^{\alpha} \tau^{\alpha} == 0$	$\partial_{\chi}\partial_{\beta}\partial^{\alpha}\tau^{\beta\chi} == \partial_{\zeta}\partial^{\chi}\partial_{\beta}\tau^{\beta\alpha}$	3	$^{\theta}_{19} \partial_{1} \mathcal{A} a^{\beta}_{\alpha} -3 r_{3}$ $^{9}_{19} \partial_{2} a^{\beta}_{\alpha} a^{-3} r_{3}$ $^{9}_{19} \partial_{2} a^{\beta}_{\alpha} a^{\beta}_{\beta} a^{\beta}_{\alpha} a^{\beta}_{\alpha} a^{\beta}_{\beta} a^{\beta}_{\alpha} a$
$1^{*2}\sigma^{\alpha}=0$	$\partial_{\chi}\partial_{\beta}\sigma^{\alpha\beta\chi} = 0$	3	$\frac{\partial}{\partial x} \frac{\partial^2 S}{\partial x^2} + $
$1^{*1} \tau^{\alpha\beta} + i k_{1}^{*2} \sigma^{\alpha\beta} == 0$	$\partial_{\chi}\partial^{\alpha}\tau^{\beta\chi} + \partial_{\chi}\partial^{\beta}\tau^{\chi\alpha} + \partial_{\chi}\partial^{\chi}\tau^{\alpha\beta} + 2 \ \partial_{\sigma}\partial_{\chi}\partial^{\alpha}\sigma^{\beta\chi\delta} + 2 \ \partial_{\sigma}\partial^{\delta}\partial_{\chi}\sigma^{\alpha\beta\chi} ==$	3	$A^{\alpha\beta}_{\alpha} = 3 r_3 \partial_i \mathcal{A}_{\beta}^{\ \theta} \partial^i \mathcal{A}^{\alpha\beta}_{\alpha}^{\ \theta}$ $\partial_0 \mathcal{A}_{i\beta}^{\ \rho} + 6 r_3 \partial^i \mathcal{A}^{\alpha\beta}_{\alpha}^{\ \sigma} \partial_i \mathcal{A}^{\alpha\beta}_{i\beta} + 6 r_3 \partial^i \mathcal{A}^{\alpha\beta}_{\alpha\beta}^{\ \sigma} \partial_i \mathcal{A}^{\alpha\beta}_{\alpha\beta} + 6 r_2 \partial_i \mathcal{A}^{\alpha\beta}_{\alpha\beta}^{\ \sigma} + 6 r_2 \partial_i \mathcal{A}^{\alpha\beta}_{\alpha\beta}^{\ \sigma} + 6 r_5 \partial_\alpha \mathcal{A}^{\alpha\beta}_{\alpha\beta}^{\ \alpha\beta}_{\alpha\beta}^{\ \alpha\beta}_{\beta\beta}^{\ \alpha\beta}_{\alpha\beta}^{\ \alpha\beta}_{\alpha\beta}^{\ \alpha\beta}_{\beta\beta}^{\ \alpha\beta}_{\alpha\beta}^{\ \alpha\beta}_{\alpha\beta}^{\ \beta\beta}_{\beta\beta}^{\ \beta\beta}_{\beta\beta}^{\ \alpha\beta}_{\alpha\beta}^{\ \alpha\beta}_{\beta\beta}^{\ \alpha\beta}_{\alpha\beta}^{\ \alpha\beta}_{\beta\beta}^{\ \beta\beta}_{\beta\beta}^{\ \alpha\beta}_{\alpha\beta}^{\ \alpha\beta}_{\beta\beta}^{\ \beta\beta}_{\beta\beta}^{\ \beta\beta}_{\beta\beta$
	$\partial_{\chi}\partial^{\alpha}\tau^{\chi\beta} + \partial_{\chi}\partial^{\beta}\tau^{\alpha\chi} + \partial_{\chi}\partial^{\chi}\tau^{\beta\alpha} + 2 \partial_{\delta}\partial_{\chi}\partial^{\beta}\sigma^{\alpha\chi\delta}$		$a^{a}_{\alpha} - 3 r_{3} \partial_{i} \mathcal{A}_{j}$ $b_{i} \mathcal{A}_{j}^{i} b_{j} + 6 r_{3}$ $b_{i} \mathcal{A}_{j}^{i} b_{j} + 6 r_{3}$ $b_{i} \mathcal{A}_{i}^{i} b_{j} + 6 r_{3}$ $b_{i} \mathcal{A}_{i}^{i} b_{j} + 6 r_{3}$ $b_{i} \mathcal{A}_{i}^{i} a_{i} - 6 r_{i}$ $b_{i} \mathcal{A}_{i}^{i} a_{i} - 6 r_{i}$
	$\begin{array}{c} \partial_{\varepsilon}\partial_{\delta}\partial^{\chi}\partial^{\alpha}\sigma^{\beta\delta\varepsilon} + 3 \; \partial_{\varepsilon}\partial^{\varepsilon}\partial^{\chi}\partial^{\alpha}\sigma^{\beta\delta}_{\;\;\delta} + 2 \; \partial_{\varepsilon}\partial^{\varepsilon}\partial_{\delta}\partial^{\beta}\sigma^{\alpha\chi\delta} + \\ 4 \; \partial_{\varepsilon}\partial^{\varepsilon}\partial_{\delta}\partial^{\beta}\sigma^{\alpha\delta\chi} + 2 \; \partial_{\varepsilon}\partial^{\varepsilon}\partial_{\delta}\partial^{\beta}\sigma^{\chi\delta\alpha} + 4 \; \partial_{\varepsilon}\partial^{\varepsilon}\partial_{\delta}\partial^{\chi}\sigma^{\alpha\beta\delta} + \\ 2 \; \partial_{\varepsilon}\partial^{\varepsilon}\partial_{\delta}\partial^{\chi}\sigma^{\alpha\delta\beta} + 2 \; \partial_{\varepsilon}\partial^{\varepsilon}\partial_{\delta}\partial^{\delta}\sigma^{\beta\chi\alpha} + 3 \; \eta^{\beta\chi} \; \partial_{\phi}\partial^{\phi}\partial_{\varepsilon}\partial^{\alpha}\sigma^{\delta\varepsilon}_{\;\;\delta} + \\ 3 \; \eta^{\alpha\chi} \; \partial_{\phi}\partial^{\phi}\partial_{\varepsilon}\partial_{\delta}\sigma^{\beta\delta\varepsilon} + 3 \; \eta^{\beta\chi} \; \partial_{\phi}\partial^{\phi}\partial_{\varepsilon}\partial^{\varepsilon}\sigma^{\alpha\delta}_{\;\;\delta} = \\ 3 \; \partial_{\varepsilon}\partial_{\delta}\partial^{\chi}\partial^{\beta}\sigma^{\alpha\delta\varepsilon} + 3 \; \partial_{\varepsilon}\partial^{\varepsilon}\partial^{\chi}\partial^{\beta}\sigma^{\alpha\delta}_{\;\;\delta} + 2 \; \partial_{\varepsilon}\partial^{\varepsilon}\partial_{\delta}\partial^{\alpha}\sigma^{\beta\chi\delta} + \\ 4 \; \partial_{\varepsilon}\partial^{\varepsilon}\partial_{\delta}\partial^{\alpha}\sigma^{\beta\delta\chi} + 2 \; \partial_{\varepsilon}\partial^{\varepsilon}\partial_{\delta}\partial^{\alpha}\sigma^{\chi\delta\beta} + 2 \; \partial_{\varepsilon}\partial^{\varepsilon}\partial_{\delta}\partial^{\chi}\sigma^{\beta\delta\alpha} + \\ 4 \; \partial_{\varepsilon}\partial^{\varepsilon}\partial_{\delta}\partial^{\delta}\sigma^{\alpha\beta\chi} + 2 \; \partial_{\varepsilon}\partial^{\varepsilon}\partial_{\delta}\partial^{\delta}\sigma^{\alpha\chi\beta} + 3 \; \eta^{\alpha\chi} \; \partial_{\phi}\partial^{\phi}\partial_{\varepsilon}\partial^{\beta}\sigma^{\delta\varepsilon}_{\;\;\delta} + \\ 3 \; \eta^{\beta\chi} \; \partial_{\phi}\partial^{\phi}\partial_{\varepsilon}\partial_{\delta}\sigma^{\alpha\delta\varepsilon} + 3 \; \eta^{\alpha\chi} \; \partial_{\phi}\partial^{\phi}\partial_{\varepsilon}\partial^{\varepsilon}\sigma^{\beta\delta}_{\;\;\delta} \end{array}$	5	$== \int \int \int \int \int \int \int \int \partial_{\alpha} d\beta $
${\stackrel{\#1}{2^+}}_{\tau}{^{\alpha\beta}}=0 \qquad 4$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	5	S ==
Total expected gauge generators:		25	•



Massive and massless spectra



Unitarity conditions