Particle spectrograph

Wave operator and propagator

											$h_{1^{-}}^{\#1}$	0	0	0	0	0	0	0	0	0	0
${\mathcal T}_{1^{\bar{-}}}^{\#1}{}_{\alpha}$	0	0	0	0	0	0	0	0	0	0	$\mathcal{A}_{1^{-}}^{\#6}$	0	0	0	0	0	$-\frac{a_0}{6}$	$-\frac{\sqrt{5} a_0}{6}$	$\frac{a_0}{6\sqrt{2}}$	$\frac{5a_0}{12}$	0
$\Delta_{1^{-}}^{\#6}\alpha$	0	0	0	0	0	$-\frac{1}{6a_0}$	$-\frac{\sqrt{5}}{6a_0}$	$-\frac{7}{3\sqrt{2}}a_0$	5 3 <i>a</i> 0	0	${\mathscr A}_{1^{\bar{-}}\alpha}^{\#5}$	0	0	0	0	0	$-\frac{a_0}{6\sqrt{2}}$	$\frac{1}{6}\sqrt{\frac{5}{2}}a_0$	3 3	$\frac{a_0}{6\sqrt{2}}$	0
$\Delta_{1^{\text{-}}\alpha}^{\#5}$	0	0	0	0	0	$-\frac{1}{6\sqrt{2}a_0}$	$-\frac{\sqrt{\frac{5}{2}}}{6a_0}$	$\frac{17}{6a_0}$	$-\frac{7}{3\sqrt{2}a_0}$	0	${\mathscr A}_{1^-}^{\#4}{}_{\alpha}$	0	0	0	0	0	$\sqrt{5} a_0$	3	$\sqrt{\frac{5}{2}} a_0$	$\sqrt{5} a_0$ 6	0
$\Delta_{1^{^{-}}\alpha}^{\#4}$	0	0	0	0	0	$\frac{5\sqrt{5}}{12a_0}$	$\frac{1}{12 a_0}$	$-\frac{\sqrt{\frac{5}{2}}}{6a_0}$	$-\frac{\sqrt{5}}{6a_0}$	0							<u> </u>		- <u>1</u> 6	-	
$\Delta_{1}^{\#3}$	0	0	0	0	0	$\frac{19}{12a_0}$	$\frac{5\sqrt{5}}{12a_0}$	$\frac{1}{\sqrt{2}}a_0$	1 6 a 0	0	${\mathscr A}_{1^-}^{\#3}$	0	0	0	0	0	$-\frac{a_0}{3}$	$\frac{\sqrt{5} a_0}{6}$	$-\frac{a_0}{6\sqrt{2}}$	$-\frac{a_0}{6}$	0
				laul		- 1	17	9	1		${\mathcal A}_{1^-}^{\#2}{}_{lpha}$	0	0	0	$\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0	0
$\Delta_{1^{\text{-}}\alpha}^{\#2}$	0	0	0	$\frac{2\sqrt{2}}{a_0}$	$\frac{2}{a_0}$	0	0	0	0	0	α	0	0	0	- <u>a</u> 0 4	$\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0
$\Delta_{1^{\text{-}}\alpha}^{\#1}$	0	0	0	0	$\frac{2\sqrt{2}}{a_0}$	0	0	0	0	0	$_{lphaeta}\mathcal{A}_{1}^{\#1}$))		9 -	2 ·)))	
$\Delta_{1}^{\#3}$	0	0	$\frac{4}{a_0}$	0	0	0	0	0	0	0	$\mathcal{A}_1^{\#3}$	0	0	4	0	0	0	0	0	0	0
$\Delta_{1}^{\#2}_{\alpha\beta}$ 4	$\frac{2\sqrt{2}}{a_0}$	$\frac{2}{a_0}$	0	0	0	0	0	0	0	0	${\mathcal A}_{1}^{\#2}{}_{lphaeta}$	$-\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0	0	0	0	0
$\Delta_1^{\#1}_{+}{}_{lphaeta}$ L_1	0	$\frac{2\sqrt{2}}{a_0}$	0	0	0	0	0	0	0	0	${\mathscr A}_{1}^{\#1}{}_{\alpha\beta}$	_ <u>4</u>	$-\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0	0	0	0
7	$\Delta_1^{\#1} \dagger^{lphaeta}$	$\Delta_{1}^{#2} + \alpha \beta$	$\Delta_{1}^{\#3} + ^{lphaeta}$	$\Delta_{1}^{\#1} +^{\alpha}$	$\Delta_{1}^{#2} +^{lpha}$	$\Delta_1^{\#3} + ^{lpha}$	$\Delta_{1}^{\#4} +^{lpha}$	$\Delta_{1}^{\#5} +^{\alpha}$	$\Delta_1^{\#6} + ^{lpha}$	$\mathcal{T}_{1}^{\#1} \dagger^{\alpha}$		$\mathcal{A}_1^{\#1} \dagger^{lphaeta}$	$\mathcal{A}_1^{\#2} \dagger^{\alpha \beta}$	$\mathcal{A}_1^{\#3} \dagger^{\alpha\beta}$	$\mathcal{A}_{1^{\bar{-}}}^{\#_1} \dagger^\alpha$	$\mathcal{A}_{1}^{\#2} \dagger^{lpha}$	${\mathscr A}_{1^{\text{-}}}^{\#3} {\dagger}^{\alpha}$	$\mathcal{A}_{1}^{\#4} +^{lpha}$	$\mathcal{A}_{1}^{\#5} +^{lpha}$	$\mathcal{A}_{1^{\bar{-}}}^{\#\bar{6}} t^{\alpha}$	$h_1^{\#1} +^{\alpha}$

)			
>	$-\frac{\sqrt{5} a_0}{6}$	$\frac{a_0}{6\sqrt{2}}$	$\frac{5a_0}{12}$	0	$A^{\alpha\beta}_{\alpha}$ α
1 -)	$-\frac{1}{6}\sqrt{\frac{5}{2}}a_0$ $-\frac{\sqrt{5}a_0}{6}$	8 3	$\frac{a_0}{6\sqrt{2}}$	0	14 $\mathcal{A}^{\alpha\beta\chi}$ ($a_0 \mathcal{A}_{\beta\chi\alpha}$ -2 $\Delta_{\alpha\beta\chi}$ + $a_0 \partial_{\beta}h_{\alpha\chi}$) + 2 $a_0 \mathcal{A}^{\alpha\beta}{}_{\alpha} \partial_{\beta}h_{\chi}^{\chi}$ -2 $a_0 h_{\chi}^{\chi} \partial_{\beta}\mathcal{A}^{\alpha}{}_{\alpha}^{\beta}$ +2 $a_0 h_{\chi}^{\chi} \partial_{\beta}\mathcal{A}^{\alpha\beta}{}_{\alpha}^{\beta}$ - 4 $a_0 h_{\alpha\chi} \partial_{\beta}\mathcal{A}^{\alpha\beta\chi}$ +4 $a_0 h^{\alpha\beta} \partial_{\beta}\partial_{\alpha}h_{\chi}^{\chi}$ - $a_0 \partial_{\beta}h_{\chi}^{\chi} \partial^{\beta}h_{\alpha}^{\alpha}$ - 4 $a_0 \partial_{\alpha}h^{\alpha\beta} \partial_{\chi}h_{\beta}^{\chi}$ +4 $a_0 \partial^{\beta}h_{\alpha}^{\alpha} \partial_{\chi}h_{\beta}^{\chi}$ +2 $a_0 \partial_{\beta}h_{\chi}^{\chi}$ +2 $a_0 \partial_{\beta}h_{\chi}^{\chi}$ +2 $a_0 \partial_{\beta}h_{\alpha}^{\chi}$ +3 $a_0 \partial_{\gamma}h_{\alpha\beta}^{\beta} \partial_{\lambda}h_{\alpha\beta}^{\beta}$ -2 $a_0 h^{\alpha} \partial_{\lambda}\partial_{\beta}h_{\chi}^{\chi}$ +4 $a_0 h^{\alpha\beta} \partial_{\lambda}\partial_{\gamma}h_{\alpha\beta}^{\beta}$ -2 $a_0 h^{\alpha} \partial_{\lambda}\partial_{\gamma}h_{\alpha\beta}^{\beta}$ -14 $a_0 h_{\beta\chi} \partial^{\chi}\mathcal{A}_{\alpha}^{\beta}$ -11 $a_0 \partial_{\beta}h_{\alpha\chi}^{\chi} \partial^{\chi}h_{\alpha\beta}^{\beta}$ -11 $a_0 \partial_{\beta}h_{\alpha\chi}^{\chi} \partial^{\chi}h_{\alpha\beta}^{\gamma}$ -11 $a_0 \partial_{\beta}h_{\alpha\chi}^{\gamma} \partial^{\chi}h_{\alpha\beta}^{\gamma}$ -11 $a_0 \partial_{\beta}h_{\alpha\chi}^{\gamma} \partial^{\chi}h_{\alpha\beta}^{\gamma} $
0	8 0 _p	$-\frac{1}{6}\sqrt{\frac{5}{2}}a_0$	$-\frac{\sqrt{5} a_0}{6}$	0	Quadratic (free) action $S == \iiint (\frac{1}{8} (8 \ h^{\alpha \beta} \mathcal{T}_{\alpha \beta} - 4 \ \mathcal{R}^{\alpha \beta \chi} (a_0 \ \mathcal{R}_{\beta \chi \alpha} - 2 \ \Delta_{\alpha \beta \chi} + a_0 \ \partial_{\beta h}^{\chi}) + \\ 2 a_0 \ \mathcal{R}^{\alpha \beta}_{\alpha} \ \partial_{\beta h}^{\chi}_{\chi} - 2 a_0 \ h^{\chi}_{\chi} \partial_{\beta} \mathcal{R}^{\alpha}_{\alpha}^{\beta} + 2 a_0 \ h^{\chi}_{\chi} \partial_{\beta} \\ 4 a_0 \ h^{\alpha \chi}_{\alpha \chi} \partial_{\beta} \mathcal{R}^{\alpha \beta \chi} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\beta} h^{\chi}_{\chi} - a_0 \partial_{\beta} h^{\chi}_{\chi} \partial^{\beta}_{\gamma} \\ 4 a_0 \partial_{\alpha} h^{\alpha \beta}_{\alpha \beta} \partial_{\chi} h^{\chi}_{\beta} + 4 a_0 \partial^{\beta} h^{\alpha}_{\alpha} \partial_{\chi} h^{\chi}_{\beta} + 2 a_0 \mathcal{R}^{\alpha}_{\beta} \\ (2 \ \mathcal{R}^{\chi}_{\chi} - \partial_{\beta} h^{\chi}_{\chi} + 2 \partial_{\chi} h^{\chi}_{\beta}) - 8 a_0 \ h^{\alpha \beta}_{\alpha \beta} \partial_{\chi} h^{\alpha \chi}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} \partial_{\kappa} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} \partial_{\kappa} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} \partial_{\kappa} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} \partial_{\kappa} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} \partial_{\kappa} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} \partial_{\kappa} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} \partial_{\kappa} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} \partial_{\kappa} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial_{\chi} h^{\alpha \beta}_{\alpha} + 4 a_0 \ h^{\alpha \beta}_{\alpha} \partial$
)	$\frac{\sqrt{5} \ a_0}{6}$	$-\frac{a_0}{6\sqrt{2}}$	- a 0	0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
	0	0	0	0	$\mathcal{A}_{\beta \chi \alpha^{-}}$ $h^{\chi}_{\chi} - 2 \iota$ $\alpha \beta \chi + 4$ $\iota^{\chi}_{\beta} + 4$ $\iota^{\chi}_{\beta} + 4$ $\iota^{\chi}_{\beta} + 4$ $\iota^{\chi}_{\beta} + 4$ $\iota^{\alpha}_{\beta} + 3$ $\iota^{\alpha}_{\alpha} + 3$ $\iota^{\alpha}_{\beta} + 3$
	0	0	0	0	$\int_{\alpha}^{3x} (a_0)^{x} (a_$
	0	0	0	0	$\frac{1}{3}$ - 4 $\Re^{\alpha t}$ $2 a_0 \Re^{\alpha t}$ $4 a_0 h_c$ $4 a_0 h_c$ $2 a_0 h_c$ $2 a_0 h_c$ $4 a_0 h_c$
	0	0	0	0	e) actio lphaeta lphaeta eta
	0	0	0	0	tic (fre
	${\mathscr A}_{1^{ ext{-}}}^{\#4}{\dagger}^{lpha}$	$\mathcal{A}_1^{\#5} +^{lpha}$	$\mathcal{A}_{1}^{\#6} +^{lpha}$	$h_1^{\#1} + \alpha$	Quadratic (free) action $S == \iiint \left(\frac{1}{8} (8 h^{\alpha \beta} \mathcal{T}_{\alpha \beta}^{-1}\right)$

								г		
	ties						$\Delta_3^{\#1}$	$t^{\alpha\beta\chi}$	$-\frac{2}{a_0}$	
	Multiplicities						${\mathcal A}_{3^-}^{\#1} {}_{lphaeta\chi}$	<u>a0</u> 2		
	Mult	1	1	8	m	∞	$\mathcal{A}^\#_{3^-}$	•		
	S			$\tau^{a\beta}$	8 β			$+^{\alpha eta \chi}$		
	field			$^{\chi}\partial^{\chi}\partial^{g}$	$\nabla_{\chi} \nabla_{\chi} \epsilon$			$\mathcal{A}_{3^-}^{\#1} +^{lphaeta\chi}$		
	ental	0 =:	0	e == X	== <i>∂</i> χ <i>ĉ</i>			0	0	
	Fundamental fields	$\partial_{\beta}\partial_{\alpha}\mathcal{T}^{\alpha\beta}==0$	$\beta_{\beta} = 0$	$\partial_{X}\partial_{\beta}\partial^{\alpha}\mathcal{T}^{\beta X} == \partial_{X}\partial^{X}\partial_{\beta}\mathcal{T}^{\alpha\beta}$	$\Delta^{\beta\chi}_{\chi}$		r#2 1	0	0	
	Fun	$\partial_{eta}\partial_{eta}$	$\partial_{\alpha}\Delta^{\alpha\beta}_{\beta} == 0$	$\partial_\chi\partial_\beta$	$2 \Delta_{1}^{\#6\alpha} + \Delta_{1}^{\#4\alpha} + 2 \Delta_{1}^{\#5\alpha} + \Delta_{1}^{\#3\alpha} == 0 \left \partial_{\beta} \partial^{\alpha} \Delta^{\beta \chi} == \partial_{\chi} \partial^{\chi} \Delta^{\alpha \beta} \right $		${\cal T}_{0}^{\#1} \ {\cal T}_{0}^{\#2} \ \Delta_{0}^{\#1}$	0	0	
					0 == χ	ator			<i>a</i> 0	
					$\Delta_{1}^{#3}$	Jener	$\Delta_{0}^{\#4}$	0	$-\frac{1}{2\sqrt{2}a_0}$	-
			0 ::		±2α+	6 əbr	$\Delta_0^{#3}$	0	$\frac{5}{4a_0}$	0
nts			\#2 0+=:		. 2 Δ ₁	s/gaı	٥		14	
Source constraints	S		$\Delta_{0+}^{#3} + 2 \Delta_{0+}^{#4} + 3 \Delta_{0+}^{#2} == 0$		#4α + [-	Total constraints/gauge generators:	$\Delta_{0}^{\#2}$	0	$-\frac{3}{4a_0}$	ц
con	SO(3) irreps	0	$\Delta_{0}^{#4}$	0 ::	+ \(\nabla_1^\daggerapsilon\)	onst		ما ٥		
rce	3) i		+ 2	1α =	#6α 1	al c	$\Delta_0^{\#1}$	$-\frac{2}{a_0}$	0	
Sou	20($T_{0}^{#2} == 0$	$\Delta_{0}^{#3}$	$\mathcal{T}_{1}^{\#1\alpha} = 0$	2 D	Tota		$\Delta_0^{\#1} \uparrow$	$\Delta_{0}^{#2} +$	
								\triangleleft	\triangleleft	

 $\Delta_3^{\#1}_{\alpha\beta\chi}$

													$\mathcal{R}^{\#}_{0}$	0	<i>a</i> ₀
	0	0	0	0	$-\frac{2}{a_0}$	e^{t_2}	0	0	0	0	0	$\frac{4}{a_0}$	$\mathcal{A}_{0}^{\#2}$	0	(
	0	0	0	0	0	$^{lphaeta\chi}$ $\Delta_{2}^{\#2}$							$\mathcal{A}_{0}^{\#1}$	$-\frac{a_0}{2}$	(
	0	0	$\frac{4}{a_0 k^2}$	0	0	$\Delta_{2^{-}}^{\#1}$ α_{I}	0	0	0	0	$\frac{4}{a_0}$	0		$\mathcal{A}_{0}^{\#1}$ \dagger	- 7#月
2 V 2 a 0	$\frac{1}{2\sqrt{2}a_0}$	$\frac{1}{2a_0}$	0	0	0	${\mathcal T}_{2}^{\#1}_{\alpha\beta}$	0	0	0	$-\frac{8}{a_0 k^2}$	0	0			Ì
4 <i>a</i> 0	3 4 a 0	$\frac{1}{\sqrt{2} a_0}$	0	0	0	$\Delta_{2}^{\#3}{}_{\alpha\beta}$	0	0	4 40	0	0	0		$_{2}^{\#1}$ † $_{2}^{\alpha}$	- 1
4 a 0	- 0	$\frac{1}{\overline{2}}a_0$				$\Delta_2^{\#2}_+ \alpha \beta$	0	$-\frac{2}{a_0}$	0	0	0	0		₂ + ι #3 † ^α 2+ †	- 1
4 (440	$-\frac{1}{2\sqrt{2}}$	0	0	0	$\Delta_2^{\#1}_{\alpha\beta}$	$\frac{4}{a_0}$	0	0	0	0	0	h.	$_{2}^{\#1}$ † $^{\alpha}$:β
	0	0	0	0	0	7	$+^{\alpha\beta}$	$+^{\alpha\beta}$	$+^{\alpha\beta}$	$+_{\alpha\beta}$	χ	$\chi_{\mathcal{G}}$	$\mathcal{A}_2^{\#}$	$\frac{1}{2} \dagger^{\alpha\beta}$	ìχ
D	$\Delta_{0}^{#3}$ †	$\Delta_{0}^{#4}$ †	${\mathcal T}^{\#1}_0 \dagger$	$\mathcal{T}_{0}^{\#2}$ †	$\Delta_{0}^{\#1} \dagger$	•	$\Delta_2^{\#1} \dagger$	$\Delta_{2}^{#2}$ †	$\Delta_{2}^{#3}$ †	$\mathcal{T}_{2}^{\#1}+$	$\Delta_{2^{-}}^{\#1} +^{\alpha\beta\chi}$	$\Delta_{2}^{#2} +^{\alpha \beta \chi}$		· -2 † ^{αβ}	- 1

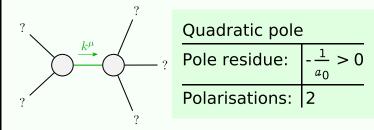
9			2					
$\mathcal{A}_{0}^{\#1}$	0	0	0	0	0	0		
$\mathcal{A}_{0^+}^{\#1} +$	$\mathcal{A}_{0}^{\#2}$ †	$\mathcal{A}_{0}^{\#3}$ †	$\mathcal{A}_{0}^{\#4}$ \dagger	$h_{0}^{#1}$ †	$h_0^{#2} +$	$\mathcal{A}_{0}^{\sharp 1} +$		
			$\mathcal{A}_{2}^{\#2}{}_{lpha_{l}}$	$_{eta}$ $\mathcal{A}_{2}^{\#_{2}^{2}}$	3 ⁺ αβ	$h_{2}^{\#1}_{lpha\beta}$	$\mathcal{A}_{2^{-}lphaeta\chi}^{\#1}$	$\mathcal{A}_{2}^{\#2}_{\alpha\beta\beta}$
$\mathcal{A}_{2}^{\#1} \dagger^{c}$	β	<u>10</u> 4	0	C)	0	0	0
$\mathcal{A}_{2}^{\#2} + ^{c}$:β	0	$-\frac{a_0}{2}$	C)	0	0	0
$\mathcal{A}_{2}^{#3} \dagger^{c}$	β	0	0	<u>a</u> (4	<u>)</u>	0	0	0
$h_{2}^{#1} \dagger^{c}$		0	0	C)	$-\frac{a_0 k^2}{8}$	0	0
$\mathscr{R}_{2}^{\sharp 1}\dagger^{lphaeta}$	SX .	0	0	C)	0	$\frac{a_0}{4}$	0
$\mathcal{A}_{2}^{\#2}\dagger^{lphaeta}$	SX	0	0	C)	0	0	<u>a₀</u> 4

0 0

0

0

Massive and massless spectra



(No massive particles)

Unitarity conditions

 $a_0 < 0$