

Lagrangian density

$$h^{\alpha\beta}\mathcal{T}_{\alpha\beta}+\frac{1}{2}\alpha\partial_\beta h^\chi_\chi\partial^\beta h^\alpha_\alpha+\beta\partial_\alpha h^{\alpha\beta}\partial_\chi h^\chi_\beta-\alpha\partial^\beta h^\alpha_\alpha\partial_\chi h^\chi_\beta-\frac{1}{2}\alpha\partial_\chi h_{\alpha\beta}\partial^\chi h^{\alpha\beta}$$

$$\begin{matrix} h^{\#1}_{0+} & h^{\#2}_{0+} \\ h^{\#1}_{0+} \vdash & \boxed{\begin{matrix} \alpha k^2 & 0 \end{matrix}} \\ h^{\#2}_{0+} \vdash & \boxed{\begin{matrix} 0 & (-\alpha+\beta)k^2 \end{matrix}} \end{matrix}$$

$$\mathcal{T}^{\#1}_{2+} \vdash^{\alpha\beta} \boxed{-\frac{2}{\alpha k^2}} \mathcal{T}^{\#1}_{2+ \alpha\beta}$$

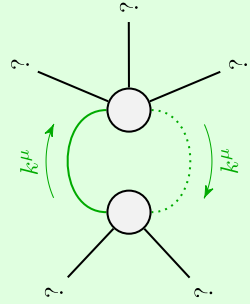
$$\begin{matrix} \mathcal{T}^{\#1}_{0+} & \mathcal{T}^{\#2}_{0+} \\ \mathcal{T}^{\#1}_{0+} \vdash & \boxed{\begin{matrix} \frac{1}{\alpha k^2} & 0 \end{matrix}} \\ \mathcal{T}^{\#2}_{0+} \vdash & \boxed{\begin{matrix} 0 & \frac{1}{(-\alpha+\beta)k^2} \end{matrix}} \end{matrix}$$

$$\boxed{\begin{matrix} h^{\#1}_{1-} \vdash^{\frac{1}{2} \frac{1}{1-}} \frac{1}{2} (-\alpha+\beta) k^2 \end{matrix}} h^{\#1}_{1-}$$

$$\mathcal{T}^{\#1}_{1-} \vdash^{\frac{1}{2} \frac{1}{1-}} \boxed{-\frac{2}{(\alpha-\beta)k^2}} \mathcal{T}^{\#1}_{1-}$$

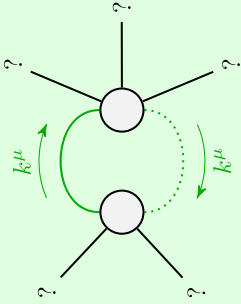
$$\boxed{-\frac{\alpha k^2}{2}} h^{\#1}_{2+} \vdash^{\alpha\beta} g h^{\#1}_{1-}$$

(No source constraints)



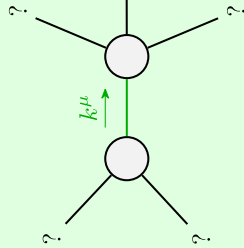
Quartic pole

| | |
|----------------|--|
| Pole residue: | $0 < \frac{6\alpha+3\beta-\sqrt{3}\sqrt{12\alpha^2+12\alpha\beta+19\beta^2+64(\alpha-\beta)^2}p^2}{\alpha(\alpha-\beta)} \&\& \frac{6\alpha+3\beta+\sqrt{3}\sqrt{12\alpha^2+12\alpha\beta+19\beta^2+64(\alpha-\beta)^2}p^2}{\alpha(\alpha-\beta)} > 0$ |
| Polarisations: | 1 |



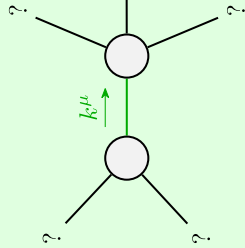
Quartic pole

| | |
|----------------|--|
| Pole residue: | $0 < \frac{6\alpha+3\beta+\sqrt{3}\sqrt{12\alpha^2+12\alpha\beta+19\beta^2+64(\alpha-\beta)^2}p^2}{\alpha(\alpha-\beta)} \&\& \frac{6\alpha+3\beta+\sqrt{3}\sqrt{12\alpha^2+12\alpha\beta+19\beta^2+64(\alpha-\beta)^2}p^2}{\alpha(\alpha-\beta)} > 0$ |
| Polarisations: | 1 |



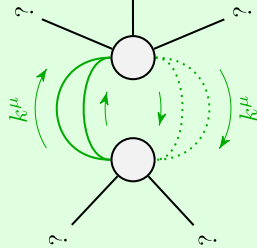
Quadratic pole

| | |
|----------------|---|
| Pole residue: | $-2\frac{\alpha+\beta+\sqrt{20\alpha^2-36\alpha\beta+17\beta^2}}{\alpha(\alpha-\beta)} > 0$ |
| Polarisations: | 1 |



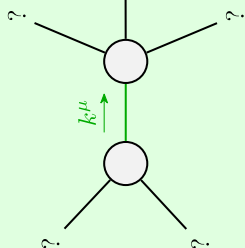
Quadratic pole

| | |
|----------------|--|
| Pole residue: | $-2\frac{\alpha\beta+\sqrt{20\alpha^2-36\alpha\beta+17\beta^2}}{\alpha^2-\alpha\beta} > 0$ |
| Polarisations: | 1 |



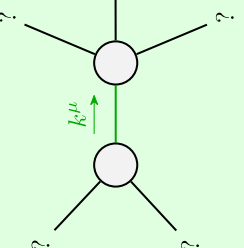
Hexic pole

| | |
|----------------|--|
| Pole residue: | $0 < \frac{2\alpha+\beta}{\alpha^2-\alpha\beta} \&\& \frac{2\alpha+\beta}{\alpha^2-\alpha\beta} > 0$ |
| Polarisations: | 1 |



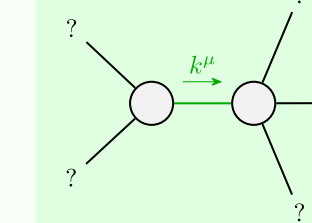
Quadratic pole

| | |
|----------------|---|
| Pole residue: | $-\frac{1}{\alpha} + \frac{5}{-\alpha+\beta} > 0$ |
| Polarisations: | 1 |



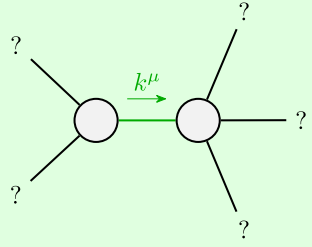
Quadratic pole

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



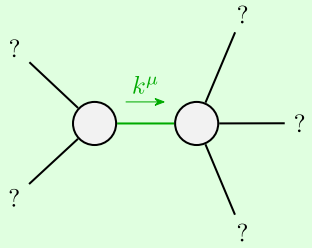
Quadratic pole

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



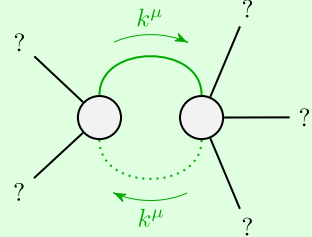
Quadratic pole

| | |
|----------------|---|
| Pole residue: | $\frac{1}{\alpha} + \frac{5}{\alpha-\beta} > 0$ |
| Polarisations: | 1 |



Quadratic pole

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



Quartic pole

| | |
|----------------|--|
| Pole residue: | $0 < \frac{\beta}{\alpha^2-\alpha\beta} \&\& \frac{\beta}{\alpha^2-\alpha\beta} > 0$ |
| Polarisations: | 2 |

Unitarity conditions
(Unitarity is demonstrably impossible)