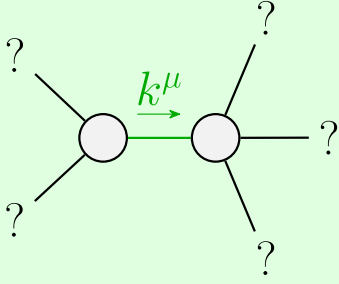


Massive particle	
Pole residue:	$-\frac{1}{r_1} > 0$
Polarisations:	5
Square mass:	$-\frac{t_1}{2r_1} > 0$
Spin:	2
Parity:	Odd



Quadratic pole	
Pole residue:	$-\frac{1}{(r_1+r_5)t_1^2} > 0$
Polarisations:	2

Unitarity conditions

$r_1 < 0 \&\& r_5 < -r_1 \&\& t_1 > 0$

$\sigma_{1+}^{\#1} \dagger \alpha \beta$	$\sigma_{1+}^{\#2} \alpha \beta$	$\tau_{1+}^{\#1} \alpha \beta$	$\sigma_{1-}^{\#1} \alpha$	$\sigma_{1-}^{\#2} \alpha$	$\tau_{1-}^{\#1} \alpha$	$\tau_{1-}^{\#2} \alpha$
$\sigma_{1+}^{\#1} \dagger \alpha \beta$	0	$-\frac{i\sqrt{2}k}{t_1+k^2t_1}$	0	0	0	0
$\sigma_{1+}^{\#2} \dagger \alpha \beta$	$-\frac{\sqrt{2}}{t_1+k^2t_1}$	$\frac{-2ik^3(2r_1+r_5)+t_1}{(1+k^2)^2t_1^2}$	0	0	0	0
$\tau_{1+}^{\#1} \dagger \alpha \beta$	$\frac{i\sqrt{2}k}{t_1+k^2t_1}$	$\frac{i(2k^3(2r_1+r_5)-kt_1)}{(1+k^2)^2t_1^2}$	0	0	0	0
$\sigma_{1-}^{\#1} \dagger \alpha$	0	0	$\frac{1}{k^2(r_1+r_5)}$	$-\frac{1}{\sqrt{2}(k^2+2k^4)(r_1+r_5)}$	0	$-\frac{i}{k(1+2k^2)(r_1+r_5)}$
$\sigma_{1-}^{\#2} \dagger \alpha$	0	0	0	$\frac{6k^2(r_1+r_5)+t_1}{2(k+2k^3)^2(r_1+r_5)t_1}$	0	$\frac{i(6k^2(r_1+r_5)+t_1)}{\sqrt{2}k(1+2k^2)^2(r_1+r_5)t_1}$
$\tau_{1-}^{\#1} \dagger \alpha$	0	0	0	0	0	0
$\tau_{1-}^{\#2} \dagger \alpha$	0	0	$\frac{i}{k(1+2k^2)(r_1+r_5)}$	$-\frac{i(6k^2(r_1+r_5)+t_1)}{\sqrt{2}k(1+2k^2)^2(r_1+r_5)t_1}$	0	$\frac{6k^2(r_1+r_5)+t_1}{(1+2k^2)^2(r_1+r_5)t_1}$

Source constraints

SO(3) irreps	#
$\sigma_{0+}^{\#1} == 0$	1
$\tau_{0+}^{\#1} == 0$	1
$\tau_{0+}^{\#2} == 0$	1
$\tau_{1-}^{\#2\alpha} + 2ik\sigma_{1-}^{\#2\alpha} == 0$	3
$\tau_{1-}^{\#1\alpha} == 0$	3
$\tau_{1+}^{\#1\alpha\beta} + ik\sigma_{1+}^{\#2\alpha\beta} == 0$	3
$\tau_{2+}^{\#1\alpha\beta} - 2ik\sigma_{2+}^{\#1\alpha\beta} == 0$	5
Total #:	17

$\sigma_{2+}^{\#1} \dagger \alpha \beta$	$\tau_{2+}^{\#1} \alpha \beta$	$\sigma_{2-}^{\#1} \alpha \beta \chi$
$\sigma_{2+}^{\#1} \dagger \alpha \beta$	$-\frac{2i\sqrt{2}k}{(1+2k^2)^2t_1}$	0
$\tau_{2+}^{\#1} \dagger \alpha \beta$	$\frac{4k^2}{(1+2k^2)^2t_1}$	0
$\sigma_{2-}^{\#1} \dagger \alpha \beta \chi$	0	$\frac{2}{2k^2r_1+t_1}$

$\sigma_{0+}^{\#1} \dagger$	$\tau_{0+}^{\#1}$	$\tau_{0+}^{\#2}$	$\sigma_{0-}^{\#1}$
$\sigma_{0+}^{\#1} \dagger$	0	0	0
$\tau_{0+}^{\#1} \dagger$	0	0	0
$\tau_{0+}^{\#2} \dagger$	0	0	0
$\sigma_{0-}^{\#1} \dagger$	0	0	$-\frac{1}{t_1}$

$\omega_{2+}^{\#1} \dagger \alpha \beta$	$f_{2+}^{\#1} \alpha \beta$	$\omega_{2-}^{\#1} \alpha \beta \chi$
$\omega_{2+}^{\#1} \dagger \alpha \beta$	$-\frac{ikt_1}{\sqrt{2}}$	0
$f_{2+}^{\#1} \dagger \alpha \beta$	$\frac{ikt_1}{\sqrt{2}}$	0
$\omega_{2-}^{\#1} \dagger \alpha \beta \chi$	0	$k^2r_1+\frac{t_1}{2}$

$\omega_{0+}^{\#1}$	$f_{0+}^{\#1}$	$f_{0+}^{\#2}$	$\omega_{0-}^{\#1}$
$\omega_{0+}^{\#1} \dagger$	0	0	0
$f_{0+}^{\#1} \dagger$	0	0	0
$f_{0+}^{\#2} \dagger$	0	0	0
$\omega_{0-}^{\#1} \dagger$	0	0	$-t_1$

$\omega_{1+}^{\#1} \dagger \alpha \beta$	$\omega_{1+}^{\#2} \alpha \beta$	$f_{1+}^{\#1} \alpha \beta$	$\omega_{1-}^{\#1} \alpha$	$\omega_{1-}^{\#2} \alpha$	$f_{1-}^{\#1} \alpha$	$f_{1-}^{\#2} \alpha$
$\omega_{1+}^{\#1} \dagger \alpha \beta$	$k^2(2r_1+r_5)-\frac{t_1}{2}$	$-\frac{t_1}{\sqrt{2}}$	0	0	0	0
$\omega_{1+}^{\#2} \dagger \alpha \beta$	$-\frac{t_1}{\sqrt{2}}$	0	0	0	0	0
$f_{1+}^{\#1} \dagger \alpha \beta$	$\frac{ikt_1}{\sqrt{2}}$	0	0	0	0	0
$\omega_{1-}^{\#1} \dagger \alpha$	0	0	$k^2(r_1+r_5)+\frac{t_1}{6}$	$\frac{t_1}{3\sqrt{2}}$	0	$\frac{ikt_1}{3}$
$\omega_{1-}^{\#2} \dagger \alpha$	0	0	$\frac{t_1}{3\sqrt{2}}$	$\frac{t_1}{3}$	0	$\frac{1}{3}i\sqrt{2}kt_1$
$f_{1-}^{\#1} \dagger \alpha$	0	0	0	0	0	0
$f_{1-}^{\#2} \dagger \alpha$	0	0	$-\frac{1}{3}ikt_1$	$-\frac{1}{3}i\sqrt{2}kt_1$	0	$\frac{2k^2t_1}{3}$