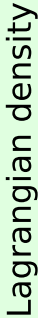

$$r_2 < 0 \&\& r_3 < 0 \&\& r_5 < -\frac{r_3}{2} \&\& t_2 > 0 \parallel r_2 < 0 \&\& r_3 < 0 \&\& r_5 > -2r_3 \&\& t_2 > 0 \parallel$$

$$r_2 < 0 \&\& r_3 > 0 \&\& -2r_3 < r_5 < -\frac{r_3}{2} \&\& t_2 > 0$$

Quadratic pole	
Pole residue:	$-\frac{1}{r_3(2r_3+r_5)(r_3+2r_5)p^2} > 0$
Polarisations:	2



$\sigma_0^{\#1}$	$\tau_0^{\#1}$	$\tau_0^{\#2}$	$\sigma_0^{\#1}$
$\frac{1}{(1+2k^2)^2t_3}$	$-\frac{i\sqrt{2}k}{(1+2k^2)^2t_3}$	0	0
$\frac{i\sqrt{2}k}{(1+2k^2)^2t_3}$	$\frac{2k^2}{(1+2k^2)^2t_3}$	0	0
0	0	0	0
0	0	0	$\frac{1}{k^2r_2+t_2}$

$\omega_2^{\#1} + \alpha\beta$	$-\frac{3k^2r_3}{2}$	$f_2^{\#1} + \alpha\beta$	$\omega_2^{\#1} + \alpha\beta$
$f_2^{\#1} + \alpha\beta$	0	$\omega_2^{\#1} + \alpha\beta$	0
$\omega_2^{\#1} + \alpha\beta\chi$	0	$\omega_2^{\#1} + \alpha\beta\chi$	0

$\omega_0^{\#1} +$	$\omega_0^{\#1}$	$f_0^{\#1}$	$f_0^{\#2}$	$\omega_0^{\#1}$
$\omega_0^{\#1} +$	t_3	$-i\sqrt{2}kt_3$	0	0
$f_0^{\#1} +$	$i\sqrt{2}kt_3$	$2k^2t_3$	0	0
$f_0^{\#2} +$	0	0	0	0
$\omega_0^{\#1} +$	0	0	0	$k^2r_2 + t_2$

Source constraints	#
$\tau_0^{*2} == 0$	1
$\tau_0^{*1} - 2ik\sigma_0^{*1} == 0$	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
$\sigma_2^{*1\alpha\beta\chi} == 0$	5
$\tau_2^{*1\alpha\beta} == 0$	5
Total #:	21

	$\sigma_{2+}^{\#1} \alpha\beta$	$\tau_{2+}^{\#1} \alpha\beta$	$\sigma_{2-}^{\#1} \alpha\beta\chi$
$\sigma_{2+}^{\#1} \dagger \alpha\beta$	$-\frac{2}{3k^2 r_3}$	0	0
$\tau_{2+}^{\#1} \dagger \alpha\beta$	0	0	0
$\sigma_{2-}^{\#1} \dagger \alpha\beta\chi$	0	0	0

	$\omega_{1^+ \alpha \beta}^{\#1}$	$\omega_{1^+ \alpha \beta}^{\#2}$	$f_{1^+ \alpha \beta}^{\#1}$	$\omega_{1^- \alpha}^{\#1}$	$\omega_{1^- \alpha}^{\#2}$	$f_{1^- \alpha}^{\#1}$	$f_{1^- \alpha}^{\#2}$
$\omega_{1^+}^{\#1} \dagger^{\alpha \beta}$	$k^2 (2r_3 + r_5) + \frac{2t_2}{3}$	$\frac{\sqrt{2} t_2}{3}$	$\frac{1}{3} i \sqrt{2} k t_2$	0	0	0	0
$\omega_{1^+}^{\#2} \dagger^{\alpha \beta}$	$\frac{\sqrt{2} t_2}{3}$	$\frac{t_2}{3}$	$\frac{i k t_2}{3}$	0	0	0	0
$f_{1^+}^{\#1} \dagger^{\alpha \beta}$	$-\frac{1}{3} i \sqrt{2} k t_2$	$-\frac{1}{3} i k t_2$	$\frac{k^2 t_2}{3}$	0	0	0	0
$\omega_{1^-}^{\#1} \dagger^\alpha$	0	0	0	$k^2 (\frac{r_3}{2} + r_5) + \frac{2t_3}{3}$	$-\frac{\sqrt{2} t_3}{3}$	0	$-\frac{2}{3} i k t_3$
$\omega_{1^-}^{\#2} \dagger^\alpha$	0	0	0	$-\frac{\sqrt{2} t_3}{3}$	$\frac{t_3}{3}$	0	$\frac{1}{3} i \sqrt{2} k t_3$
$f_{1^-}^{\#1} \dagger^\alpha$	0	0	0	0	0	0	0
$f_{1^-}^{\#2} \dagger^\alpha$	0	0	0	$\frac{2 i k t_3}{3}$	$-\frac{1}{3} i \sqrt{2} k t_3$	0	$\frac{2 k^2 t_3}{3}$