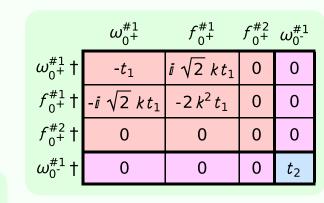
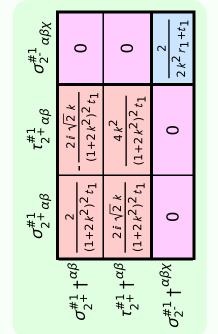
$\frac{2}{3}r_{1}\partial_{\kappa}\omega^{\alpha\beta\theta}\partial^{\kappa}\omega_{\alpha\beta\theta} - \frac{2}{3}r_{1}\partial_{\kappa}\omega^{\theta\alpha\beta}\partial^{\kappa}\omega_{\alpha\beta\theta} + \frac{2}{3}r_{1}\partial^{\beta}\omega_{\alpha}^{\ \alpha\lambda}\partial_{\lambda}\omega_{\alpha\beta}^{\ \prime} -$	$\frac{1}{6}t_2\partial_\kappa f_{\beta}^{\lambda}\partial^\kappa f_{\lambda}^{\beta} + \frac{2}{3}t_1\partial_\kappa f^{\lambda}_{\beta}\partial^\kappa f_{\lambda}^{\beta} + \frac{1}{6}t_2\partial_\kappa f^{\lambda}_{\beta}\partial^\kappa f_{\lambda}^{\beta} - t_1\partial^\alpha f^{\lambda}_{\alpha}\partial^\kappa f_{\lambda\kappa} +$	$t_1\;\omega_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{$	$t_2 \partial^{\alpha} f_{\kappa\theta} \partial^{\kappa} f_{\alpha}^{\ \theta} - \frac{1}{3} t_1 \partial^{\alpha} f^{\lambda}_{\ \kappa} \partial^{\kappa} f_{\alpha\lambda} + \frac{1}{6} t_2 \partial^{\alpha} f^{\lambda}_{\ \kappa} \partial^{\kappa} f_{\alpha\lambda} + t_1 \omega_{\kappa\alpha}^{\ \alpha} \partial^{\kappa} f'_{\ \prime} +$	$r_1 \partial_\theta \omega_\lambda^{\ \alpha} \partial_\kappa \omega^{\kappa\lambda\theta} - \frac{1}{3} t_1 \partial^\alpha f_{\theta\kappa} \partial^\kappa f_\alpha^{\ \theta} + \frac{1}{6} t_2 \partial^\alpha f_{\theta\kappa} \partial^\kappa f_\alpha^{\ \theta} - \frac{2}{3} t_1 \partial^\alpha f_{\kappa\theta} \partial^\kappa f_\alpha^{\ \theta} -$	$r_1 \partial_{\alpha} \omega_{\lambda}^{\ \ \alpha} \partial_{\kappa} \omega^{\theta \kappa \lambda} - 2 r_1 \partial_{\theta} \omega_{\lambda}^{\ \ \alpha} \partial_{\kappa} \omega^{\theta \kappa \lambda} + 2 r_1 \partial_{\alpha} \omega_{\lambda}^{\ \ \alpha} \partial_{\kappa} \omega^{\kappa \lambda \theta} -$	$r_1 \partial^{\beta} \omega^{\theta \alpha}_{\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	$t_2\;\omega_{\kappa\lambda}^{\prime}\;\omega^{\kappa\lambda}^{\prime}+f^{lphaeta}\; au_{lphaeta}^{\kappa}\;\sigma_{lphaeta\chi}^{\kappa}+2r_1\partial_{\scriptscriptstyle 1}\omega^{\kappa\lambda}^{\kappa}\partial^{\scriptscriptstyle 1}\omega_{\lambda}^{lpha}.$	$_{1}\;\omega_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{$	Lagrangian density
$1 \omega_{/\lambda}^{\lambda} \partial^{\kappa} f'_{\kappa} + \frac{1}{3} t_{1} \partial^{\alpha} f'_{\kappa} \partial^{\kappa} f_{\lambda \alpha} - \frac{1}{6} t_{2} \partial^{\alpha} f'_{\lambda \alpha} + \frac{1}{3} t_{1} \partial_{\kappa} f_{\theta}^{\lambda} \partial^{\kappa} f_{\lambda}^{\theta} - $ $\vdots t_{2} \partial_{\kappa} f_{\theta}^{\lambda} \partial^{\kappa} f_{\lambda}^{\lambda} + \frac{2}{3} t_{1} \partial_{\kappa} f^{\lambda}_{\theta} \partial^{\kappa} f_{\lambda}^{\lambda} + \frac{1}{6} t_{2} \partial_{\kappa} f^{\lambda}_{\theta} \partial^{\kappa} f_{\lambda}^{\theta} - t_{1} \partial^{\alpha} f^{\lambda}_{\lambda} \partial^{\kappa} f_{\lambda \kappa} + $	$_{1}\;\omega_{_{/\lambda}}^{\;\;\lambda}\;\partial^{\kappa}f_{_{K}}'+\tfrac{1}{3}t_{1}\partial^{\alpha}f_{_{A}}^{\;\;\lambda}\;\partial^{\kappa}f_{_{A\alpha}}-\tfrac{1}{6}t_{2}\partial^{\alpha}f_{_{A}}^{\;\;\lambda}\;\partial^{\kappa}f_{_{A\alpha}}+\tfrac{1}{3}t_{1}\partial_{\kappa}f_{_{\beta}}^{\;\;\lambda}\partial^{\kappa}f_{_{\lambda}}^{\;\;\beta}-$		$ (\omega_{\kappa\lambda}{}^{\lambda} \partial^{\kappa} f'_{\ \ \ } + 2 t_{1} \partial^{\alpha} f_{\kappa\alpha} \partial^{\kappa} f'_{\ \ \ \ } - t_{1} \partial_{\kappa} f^{\lambda}{}_{\lambda} \partial^{\kappa} f'_{\ \ \ } + \frac{1}{3} t_{1} \omega_{\beta\kappa} \partial^{\kappa} f^{\beta}{}^{\beta} + $ $ t_{2} \omega_{\beta\kappa} \partial^{\kappa} f^{\beta} + \frac{4}{3} t_{1} \omega_{\beta\kappa} \partial^{\kappa} f^{\beta}{}^{\beta} - \frac{2}{3} t_{2} \omega_{\kappa} \partial^{\kappa} f^{\beta}{}^{\beta} - \frac{1}{3} t_{1} \omega_{\theta\kappa} \partial^{\kappa} f^{\beta}{}^{\beta} - $	$\begin{aligned} & t_{2} \partial^{\alpha} f_{\kappa \theta} \partial^{\kappa} f_{\alpha}^{ \theta} - \frac{1}{3} t_{1} \partial^{\alpha} f^{\lambda}_{ \kappa} \partial^{\kappa} f_{\alpha \lambda} + \frac{1}{6} t_{2} \partial^{\alpha} f^{\lambda}_{ \kappa} \partial^{\kappa} f_{\alpha \lambda} + t_{1} \omega_{\kappa \alpha}^{ \alpha} \partial^{\kappa} f'_{ \kappa} + t_{1} \\ & . \omega_{\kappa \lambda}^{ \lambda} \partial^{\kappa} f'_{ \kappa} + 2 t_{1} \partial^{\alpha} f_{\kappa \alpha} \partial^{\kappa} f'_{ \kappa} - t_{1} \partial^{\kappa} f^{\lambda}_{ \lambda} \partial^{\kappa} f'_{ \kappa} + \frac{1}{3} t_{1} \omega_{\mu \rho \kappa} \partial^{\kappa} f'^{\theta} + t_{2} \\ & . t_{2} \omega_{\mu \rho \kappa} \partial^{\kappa} f'^{\theta} + \frac{4}{3} t_{1} \omega_{\mu \rho} \partial^{\kappa} f'^{\theta} - \frac{2}{3} t_{2} \omega_{\mu \rho} \partial^{\kappa} f'^{\theta} - \frac{1}{3} t_{1} \omega_{\rho \mu} \partial^{\kappa} f'^{\theta} - t_{2} \\ \end{aligned}$	$\begin{split} r_{1} \partial_{\theta} \omega_{\lambda}{}^{\alpha}{}_{\alpha} \partial_{\kappa} \omega^{\kappa \lambda \theta}{}_{-\frac{1}{3}} t_{1} \partial^{\alpha} f_{\theta \kappa} \partial^{\kappa} f_{\alpha}{}_{\alpha}{}_{+\frac{1}{6}} t_{2} \partial^{\alpha} f_{\theta \kappa} \partial^{\kappa} f_{\alpha}{}_{-\frac{2}{3}} t_{1} \partial^{\alpha} f_{\kappa \theta} \partial^{\kappa} f_{\alpha}{}_{\alpha}{}_{-\frac{2}{3}} \\ t_{2} \partial^{\alpha} f_{\kappa \theta} \partial^{\kappa} f_{\alpha}{}_{-\frac{1}{3}} t_{1} \partial^{\alpha} f^{\lambda}{}_{\kappa} \partial^{\kappa} f_{\alpha \lambda}{}_{+\frac{1}{6}} t_{2} \partial^{\alpha} f^{\lambda}{}_{\kappa} \partial^{\kappa} f_{\alpha \lambda}{}_{+t_{1}} \omega_{\kappa \alpha}{}^{\alpha} \partial^{\kappa} f'{}_{,}{}_{+} \\ . \omega_{\kappa \lambda}{}^{\lambda} \partial^{\kappa} f'{}_{,}{}_{+} 2 t_{1} \partial^{\alpha} f_{\kappa \alpha} \partial^{\kappa} f'{}_{,}{}_{-t_{1}} \partial^{\kappa} f^{\lambda}{}_{\lambda} \partial^{\kappa} f'{}_{,}{}_{+\frac{1}{3}} t_{1} \omega_{,\theta \kappa} \partial^{\kappa} f'{}_{,\theta}{}_{+} \\ . t_{2} \omega_{,\theta \kappa}{}^{\lambda} \partial^{\kappa} f'{}_{,\theta}{}_{+\frac{4}{3}} t_{1} \omega_{,\kappa \theta}{} \partial^{\kappa} f'{}_{,\theta}{}_{-\frac{2}{3}} t_{2} \omega_{,\kappa \theta}{} \partial^{\kappa} f'{}_{,\theta}{}_{-\frac{1}{3}} t_{1} \omega_{\theta ,\kappa}{} \partial^{\kappa} f'{}_{,\theta}{}_{-} \\ \end{split}$	$\begin{split} r_{1} \partial_{\alpha} \omega_{\lambda}^{\ \alpha} \partial_{\kappa} \omega^{\theta \kappa \lambda} - 2 r_{1} \partial_{\theta} \omega_{\lambda}^{\ \alpha} \partial_{\kappa} \omega^{\theta \kappa \lambda} + 2 r_{1} \partial_{\alpha} \omega_{\lambda}^{\ \alpha} \partial_{\kappa} \omega^{\kappa \lambda \theta} - \\ r_{1} \partial_{\theta} \omega_{\lambda}^{\ \alpha} \partial_{\kappa} \omega^{\kappa \lambda \theta} - \frac{1}{3} t_{1} \partial^{\alpha} f_{\theta \kappa} \partial^{\kappa} f_{\alpha}^{\ \theta} + \frac{1}{6} t_{2} \partial^{\alpha} f_{\theta \kappa} \partial^{\kappa} f_{\alpha}^{\ \theta} - \frac{2}{3} t_{1} \partial^{\alpha} f_{\kappa \theta} \partial^{\kappa} f_{\alpha}^{\ \theta} - \\ t_{2} \partial^{\alpha} f_{\kappa \theta} \partial^{\kappa} f_{\alpha}^{\ \theta} - \frac{1}{3} t_{1} \partial^{\alpha} f_{\lambda}^{\ \lambda} \partial^{\kappa} f_{\alpha \lambda}^{\ \lambda} + \frac{1}{6} t_{2} \partial^{\alpha} f^{\lambda}_{\ \lambda} \partial^{\kappa} f_{\alpha \lambda}^{\ \lambda} + t_{1} \omega_{\kappa \alpha}^{\ \alpha} \partial^{\kappa} f'_{\ \mu}^{\ \mu} + \\ \omega_{\kappa \lambda}^{\ \lambda} \partial^{\kappa} f'_{\ \mu} + 2 t_{1} \partial^{\alpha} f_{\kappa \alpha}^{\ \lambda} \partial^{\kappa} f'_{\ \mu}^{\ \mu} - \frac{1}{3} t_{1} \omega_{\mu \kappa}^{\ \mu} \partial^{\kappa} f'_{\ \mu}^{\ \theta} + \\ t_{2} \omega_{\mu \kappa}^{\ \lambda} \partial^{\kappa} f'_{\ \mu}^{\ \theta} + \frac{4}{3} t_{1} \omega_{\mu \kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \frac{1}{3} t_{1} \omega_{\theta \mu}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \\ t_{2} \omega_{\mu \kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \frac{1}{3} t_{1} \omega_{\mu \kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \\ \eta_{\kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \frac{1}{3} t_{2} \omega_{\mu \kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \frac{1}{3} t_{2} \omega_{\mu \kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \\ \eta_{\kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \frac{1}{3} t_{2} \omega_{\mu \kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \\ \eta_{\kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \frac{1}{3} t_{2} \omega_{\mu \kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \\ \eta_{\kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \frac{1}{3} t_{2} \omega_{\mu \kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \\ \eta_{\kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \frac{1}{3} t_{2} \omega_{\mu \kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \\ \eta_{\kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \frac{1}{3} t_{2} \omega_{\mu \kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \\ \eta_{\kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \frac{1}{3} t_{2} \omega_{\mu \kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \\ \eta_{\kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \mu} - \frac{1}{3} t_{2} \omega_{\mu \kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \theta} - \\ \eta_{\kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \mu} - \frac{1}{3} t_{2} \omega_{\mu \kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \mu} - \\ \eta_{\kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \mu} - \frac{1}{3} t_{2} \omega_{\mu}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \mu} - \\ \eta_{\kappa}^{\ \mu} \partial^{\kappa} f'_{\ \theta}^{\ \mu} - \frac{1}{$	$\begin{split} r_1 \partial^\beta \omega^{\theta \alpha}_{\ \ \kappa} \partial_\theta \omega_{\alpha\beta}^{\ \ \kappa} - \frac{2}{3} r_1 \partial_\theta \omega_{\alpha\beta}^{\ \ \kappa} \partial_\kappa \omega^{\alpha\beta\theta} + \frac{2}{3} r_1 \partial_\theta \omega_{\alpha\beta}^{\ \ \kappa} \partial_\kappa \omega^{\theta\alpha\beta} + \\ r_1 \partial_\alpha \omega_{\lambda}^{\ \ \alpha} \partial_\kappa \omega^{\theta\kappa\lambda} - 2 r_1 \partial_\theta \omega_{\lambda}^{\ \ \alpha} \partial_\kappa \omega^{\theta\kappa\lambda} + 2 r_1 \partial_\alpha \omega_{\lambda}^{\ \ \alpha} \partial_\kappa \omega^{\kappa\lambda\theta} - \\ r_1 \partial_\theta \omega_{\lambda}^{\ \ \alpha} \partial_\kappa \omega^{\kappa\lambda\theta} - \frac{1}{3} t_1 \partial^\alpha f_{\theta\kappa} \partial^\kappa f_{\alpha}^{\ \ \theta} + \frac{1}{6} t_2 \partial^\alpha f_{\theta\kappa} \partial^\kappa f_{\alpha}^{\ \ \theta} - \frac{2}{3} t_1 \partial^\alpha f_{\kappa\theta} - \frac{2}{3} t_1 \partial^\alpha f_{\kappa\theta}^{\ \ \theta} - \\ t_2 \partial^\alpha f_{\kappa\theta} \partial^\kappa f_{\alpha}^{\ \ \theta} - \frac{1}{3} t_1 \partial^\alpha f_{\lambda}^{\ \ \lambda} + \frac{1}{6} t_2 \partial^\alpha f_{\lambda}^{\ \ \lambda} + t_1 \omega_{\kappa\alpha}^{\ \ \alpha} \partial^\kappa f'_{\lambda}^{\ \ \beta} + \\ \omega_{\kappa\lambda}^{\ \ \lambda} \partial^\kappa f'_{\lambda} + 2 t_1 \partial^\alpha f_{\kappa\alpha}^{\ \ \lambda} \partial^\kappa f'_{\lambda} - t_1 \partial_\kappa f_{\lambda}^{\ \ \lambda} \partial^\kappa f'_{\lambda}^{\ \ \beta} + \frac{1}{3} t_1 \omega_{\mu\kappa}^{\ \ \beta} \partial^\kappa f'_{\theta}^{\ \ \theta} - \\ t_2 \omega_{\iota\theta\kappa}^{\ \ \lambda} \partial^\kappa f'_{\theta} + \frac{4}{3} t_1 \omega_{\iota\kappa\theta}^{\ \ \beta} \partial^\kappa f'_{\theta} - \frac{1}{3} t_2 \omega_{\iota\kappa\theta}^{\ \ \beta} \partial^\kappa f'_{\theta}^{\ \ \theta} - \frac{1}{3} t_1 \omega_{\theta\iota\kappa}^{\ \ \beta} \partial^\kappa f'_{\theta}^{\ \ \theta} - \\ t_2 \omega_{\iota\theta\kappa}^{\ \ \beta} \partial^\kappa f'_{\theta} + \frac{4}{3} t_1 \omega_{\iota\kappa\theta}^{\ \ \beta} \partial^\kappa f'_{\theta} - \frac{1}{3} t_2 \omega_{\iota\kappa\theta}^{\ \ \beta} \partial^\kappa f'_{\theta}^{\ \ \theta} - \frac{1}{3} t_1 \omega_{\theta\iota\kappa}^{\ \ \beta} \partial^\kappa f'_{\theta}^{\ \ \theta} - \\ \end{split}$	$\begin{split} t_{2} \; \omega_{\kappa\lambda}^{\ \ \prime} \; \omega^{\kappa\lambda}_{\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	$-t_{1} \omega_{\kappa}^{(a)} \omega_{\kappa\alpha}^{\ \ \kappa} - \frac{1}{3} t_{1} \omega_{\kappa\lambda}^{\ \ k} \omega_{\kappa\lambda}^{\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
$\frac{1}{3}t_{2} \omega_{\theta_{IK}} \partial^{k} f^{I\theta} + \frac{2}{3}t_{1} \omega_{\theta_{KI}} \partial^{k} f^{I\theta} + \frac{2}{3}t_{2} \omega_{\theta_{KI}} \partial^{k} f^{I\theta} - t_{1} \omega_{I\alpha}^{\alpha} \partial^{k} f^{I}_{\kappa} - t_{1} \omega_{I\alpha}^{\alpha} \partial^{k} f^{I}_{\kappa} - t_{2} \partial^{\alpha} f^{\lambda} \partial^{k} f^{\lambda}_{\lambda \alpha} + \frac{1}{3}t_{1} \partial_{\kappa} f^{\lambda}_{\theta} \partial^{k} f^{\lambda}_{\theta} - t_{2} \partial^{\alpha} f^{\lambda}_{\lambda \alpha} \partial^{k} f^{\lambda}_{\lambda \alpha} + \frac{1}{3}t_{1} \partial_{\kappa} f^{\lambda}_{\theta} \partial^{k} f^{\lambda}_{\theta} - t_{2} \partial^{\alpha} f^{\lambda}_{\lambda \alpha} \partial^{k} f^{\lambda}_{\lambda} + \frac{1}{6}t_{2} \partial_{\kappa} f^{\lambda}_{\theta} \partial^{k} f^{\lambda}_{\theta} - t_{1} \partial^{\alpha} f^{\lambda}_{\lambda} \partial^{k} f^{\lambda}_{\lambda} + d^{\alpha} \partial^{\alpha} f^{\lambda}_{\lambda \alpha} \partial^{k} f^{\lambda}_{\lambda} - t_{1} \partial^{\alpha} f^{\lambda}_{\lambda} \partial^{k} f^{\lambda}_{\lambda} + d^{\alpha} \partial^{\alpha} f^{\lambda}_{\lambda} \partial^{\alpha} f^$	$t_{2} \omega_{\theta \kappa} \partial^{\kappa} f^{l\theta} + \frac{2}{3} t_{1} \omega_{\theta \kappa_{l}} \partial^{\kappa} f^{l\theta} + \frac{2}{3} t_{2} \omega_{\theta \kappa_{l}} \partial^{\kappa} f^{l\theta} - t_{1} \omega_{l\alpha}^{\ \alpha} \partial^{\kappa} f^{l}_{\kappa} - t_{1} \omega_{l\alpha}^{\ \alpha} \partial^{\kappa} f^{l}_{\kappa} - t_{1} \partial_{\alpha} f^{l}_{\kappa} \partial^{\kappa} f^{l}_{\kappa} - t_{1} \partial_{\alpha} f^{l}_{\kappa} \partial^{\kappa} f^{l}_{\lambda} \partial^{\kappa} f^{l}_{\lambda} - t_{1} \partial_{\alpha} f^{l}_{\lambda} \partial^{\kappa} f^{l}$	$t_2 \omega_{ heta_{lk}} \partial^{\kappa} f^{l\theta} + \frac{2}{3} t_1 \omega_{ heta_{kl}} \partial^{\kappa} f^{l\theta} + \frac{2}{3} t_2 \omega_{ heta_{kl}} \partial^{\kappa} f^{l\theta} - t_1 \omega_{l\alpha}^{\ \ \alpha} \partial^{\kappa} f^{l}_{\ \ \kappa} -$	$[\omega_{\kappa\lambda}^{\ \lambda}\partial^{\kappa}f'_{\ \prime}+2t_{1}\partial^{\alpha}f_{\kappa\alpha}\partial^{\kappa}f'_{\ \prime}-t_{1}\partial_{\kappa}f^{\lambda}_{\ \lambda}\partial^{\kappa}f'_{\ \prime}+\frac{1}{3}t_{1}\omega_{,\theta\kappa}\partial^{\kappa}f^{\prime\theta}+$	$t_2 \partial^{\alpha} f_{\kappa\theta} \partial^{\kappa} f_{\alpha}^{\ \theta} - \frac{1}{3} t_1 \partial^{\alpha} f^{\lambda}_{\ \kappa} \partial^{\kappa} f_{\alpha\lambda} + \frac{1}{6} t_2 \partial^{\alpha} f^{\lambda}_{\ \kappa} \partial^{\kappa} f_{\alpha\lambda} + t_1 \ \omega_{\kappa\alpha}^{\ \alpha} \partial^{\kappa} f'_{\ \prime} + \dots$ $\cdot \omega_{\kappa\lambda}^{\ \lambda} \partial^{\kappa} f'_{\ \prime} + 2 t_1 \partial^{\alpha} f_{\kappa\alpha}^{\ \prime} \partial^{\kappa} f'_{\ \prime} - t_1 \partial_{\kappa} f^{\lambda}_{\ \lambda} \partial^{\kappa} f'_{\ \prime} + \frac{1}{3} t_1 \ \omega_{\ell\theta\kappa}^{\ \ell\theta} \partial^{\kappa} f'_{\ell\theta} + \dots$	$\begin{split} r_1 \partial_\theta \omega_\lambda^{\ \alpha} \partial_\kappa \omega^{\kappa\lambda\theta} - \frac{1}{3} t_1 \partial^\alpha f_{\theta \kappa} \partial^\kappa f_\alpha^{\ \theta} + \frac{1}{6} t_2 \partial^\alpha f_{\theta \kappa} \partial^\kappa f_\alpha^{\ \theta} - \frac{2}{3} t_1 \partial^\alpha f_{\kappa\theta} \partial^\kappa f_\alpha^{\ \theta} - \\ t_2 \partial^\alpha f_{\kappa\theta} \partial^\kappa f_\alpha^{\ \theta} - \frac{1}{3} t_1 \partial^\alpha f^\lambda_{\ \kappa} \partial^\kappa f_{\alpha\lambda} + \frac{1}{6} t_2 \partial^\alpha f^\lambda_{\ \kappa} \partial^\kappa f_{\alpha\lambda} + t_1 \omega_{\kappa\alpha}^{\ \alpha} \partial^\kappa f'_\gamma + \\ \cdot \omega_{\kappa\lambda}^{\ \lambda} \partial^\kappa f'_\gamma + 2 t_1 \partial^\alpha f_{\kappa\alpha} \partial^\kappa f'_\gamma - t_1 \partial_\kappa f^\lambda_{\ \lambda} \partial^\kappa f'_\gamma + \frac{1}{3} t_1 \omega_{\beta\kappa} \partial^\kappa f'_\beta + \end{split}$	$\begin{split} r_1 \partial_\alpha \omega_\lambda^{\ \alpha} \partial_\kappa \omega^{\theta \kappa \lambda} - 2 r_1 \partial_\theta \omega_\lambda^{\ \alpha} \partial_\kappa \omega^{\theta \kappa \lambda} + 2 r_1 \partial_\alpha \omega_\lambda^{\ \alpha} \partial_\kappa \omega^{\kappa \lambda \theta} - \\ r_1 \partial_\theta \omega_\lambda^{\ \alpha} \partial_\kappa \omega^{\kappa \lambda \theta} - \frac{1}{3} t_1 \partial^\alpha f_{\theta \kappa} \partial^\kappa f_{\alpha}^{\ \theta} + \frac{1}{6} t_2 \partial^\alpha f_{\theta \kappa} \partial^\kappa f_{\alpha}^{\ \theta} - \frac{2}{3} t_1 \partial^\alpha f_{\kappa \theta}^{\ \theta} - \frac{1}{3} t_1 \partial^\alpha f_{\lambda}^{\ \lambda} \partial^\kappa f_{\alpha \lambda} + \frac{1}{6} t_2 \partial^\alpha f_{\lambda}^{\ \lambda} \partial^\kappa f_{\alpha \lambda}^{\ \lambda} + t_1 \omega_{\kappa \alpha}^{\ \alpha} \partial^\kappa f_{\gamma}^{\ \beta} + \\ \vdots \\ \omega_{\kappa \lambda}^{\ \lambda} \partial^\kappa f_{\gamma}^{\ \beta} + 2 t_1 \partial^\alpha f_{\kappa \alpha}^{\ \lambda} \partial^\kappa f_{\gamma}^{\ \beta} - t_1 \partial_\kappa f_{\lambda}^{\ \lambda} \partial^\kappa f_{\gamma}^{\ \beta} + \frac{1}{3} t_1 \omega_{\beta \kappa}^{\ \beta} \partial^\kappa f_{\beta}^{\ \beta} + \end{split}$	$\begin{split} r_1 \partial^\beta \omega^{\theta \alpha}_{\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	$t_{2} \omega_{\kappa\lambda}^{k,l} \omega^{\kappa\lambda}_{,l} + f^{\alpha\beta} \tau_{\alpha\beta} \tau_{\alpha\beta\lambda} \sigma_{\alpha\beta\chi} + 2 r_{1} \partial_{l} \omega^{\kappa\lambda}_{,k} \partial^{l} \omega_{\lambda}^{\alpha}_{,a} -$ $r_{1} \partial^{\beta} \omega^{\theta\alpha}_{,k} \partial_{\theta} \omega_{\alpha\beta}^{k} - \frac{2}{3} r_{1} \partial_{\theta} \omega_{\alpha\beta}^{k} \partial_{\kappa} \omega^{\alpha\beta\theta} + \frac{2}{3} r_{1} \partial_{\theta} \omega_{\alpha\beta}^{k} \partial_{\kappa} \omega^{\theta\alpha\beta} +$ $r_{1} \partial_{\alpha} \omega_{\lambda}^{\alpha} \partial_{\kappa} \omega^{\theta\kappa\lambda}_{,l} - 2 r_{1} \partial_{\theta} \omega_{\lambda}^{\alpha} \partial_{\kappa} \omega^{\theta\kappa\lambda}_{,l} + 2 r_{1} \partial_{\alpha} \omega_{\lambda}^{\alpha} \partial_{\kappa} \omega^{\kappa\lambda\theta}_{,l} -$ $r_{1} \partial_{\theta} \omega_{\lambda}^{\alpha} \partial_{\kappa} \omega^{\kappa\lambda\theta}_{,l} - \frac{1}{3} t_{1} \partial^{\alpha} f_{\theta\kappa} \partial^{\kappa} f_{\alpha}^{\theta} + \frac{1}{6} t_{2} \partial^{\alpha} f_{\theta\kappa} \partial^{\kappa} f_{\alpha}^{\theta} - \frac{2}{3} t_{1} \partial^{\alpha} f_{\kappa\theta} \partial^{\kappa} f_{\alpha}^{\theta} -$ $t_{2} \partial^{\alpha} f_{\kappa\theta} \partial^{\kappa} f_{\alpha}^{\theta} - \frac{1}{3} t_{1} \partial^{\alpha} f_{\kappa} \partial^{\kappa} f_{\alpha\lambda}_{,l} + \frac{1}{6} t_{2} \partial^{\alpha} f_{\alpha\lambda}_{,l} \partial^{\kappa} f_{\alpha\lambda}_{,l} + t_{1} \omega_{\kappa\alpha}^{\alpha} \partial^{\kappa} f_{\alpha}_{,l} +$ $t_{2} \partial^{\alpha} f_{\kappa\theta} \partial^{\kappa} f_{\alpha}^{\theta} - \frac{1}{3} t_{1} \partial^{\alpha} f_{\kappa}^{\lambda} \partial^{\kappa} f_{\alpha\lambda}_{,l} + \frac{1}{6} t_{2} \partial^{\alpha} f_{\alpha\lambda}_{,l} + t_{1} \omega_{\kappa\alpha}^{\alpha} \partial^{\kappa} f_{\alpha}_{,l} +$ $\omega_{\kappa\lambda}^{\lambda} \partial^{\kappa} f_{l}^{\prime} + 2 t_{1} \partial^{\alpha} f_{\kappa\alpha}^{\lambda} \partial^{\kappa} f_{l}^{\prime} - t_{1} \partial_{\kappa} f_{\lambda}^{\lambda} \partial^{\kappa} f_{l}^{\prime} + \frac{1}{3} t_{1} \omega_{l\theta\kappa}^{\lambda} \partial^{\kappa} f_{l}^{\prime} +$ $\omega_{\kappa\lambda}^{\lambda} \partial^{\kappa} f_{l}^{\prime} + 2 t_{1} \partial^{\alpha} f_{\kappa\alpha}^{\lambda} \partial^{\kappa} f_{l}^{\prime} - t_{1} \partial_{\kappa} f_{\lambda}^{\lambda} \partial^{\kappa} f_{l}^{\prime} + \frac{1}{3} t_{1} \omega_{l\theta\kappa}^{\lambda} \partial^{\kappa} f_{l}^{\prime} +$	$ \begin{array}{l} {}^{1} \omega_{\kappa \alpha}^{\ \alpha \prime} \ \omega_{\kappa \alpha}^{\ \kappa - \frac{1}{3}} t_{1} \ \omega_{\kappa \lambda}^{\ \kappa \lambda} \ \omega_{\kappa \lambda}^{\ \prime + \frac{1}{3}} t_{2} \ \omega_{\kappa \lambda}^{\ \kappa \lambda} \ \omega_{\kappa \lambda}^{\ \prime + \frac{1}{3}} t_{1} \ \omega_{\kappa \lambda}^{\ \prime } \ \omega_{\kappa \lambda}^{\ \prime + +} \\ \\ {}^{1} t_{2} \ \omega_{\kappa \lambda}^{\ \prime \prime} \ \omega_{\kappa \lambda}^{\ \prime + +} f^{\alpha \beta} \ t_{\alpha \beta} + \omega^{\alpha \beta \chi} \ \sigma_{\alpha \beta \chi} + 2 r_{1} \partial_{i} \omega_{\kappa \lambda}^{\ \kappa \lambda} \partial_{i} \omega_{\lambda}^{\ \alpha} - \\ \\ {}^{1} r_{1} \partial^{\beta}_{\beta} \omega^{\theta \alpha}_{\beta}^{\ \beta} - \frac{2}{3} r_{1} \partial_{\theta} \omega_{\alpha \beta}^{\ \kappa} \partial_{\kappa} \omega^{\alpha \beta \theta} + \frac{2}{3} r_{1} \partial_{\theta} \omega_{\alpha \beta}^{\ \kappa \lambda} \partial_{\kappa} \omega^{\kappa \lambda \theta} - \\ \\ {}^{1} r_{1} \partial_{\alpha} \omega_{\lambda}^{\ \alpha} \partial_{\kappa} \omega^{\theta \kappa \lambda} - 2 r_{1} \partial_{\theta} \omega_{\lambda}^{\ \alpha} \partial_{\kappa} \omega^{\theta \kappa \lambda} + 2 r_{1} \partial_{\alpha} \omega_{\lambda}^{\ \alpha} \partial_{\kappa} \omega^{\kappa \lambda \theta} - \\ \\ {}^{1} r_{1} \partial_{\theta} \omega_{\lambda}^{\ \alpha} \partial_{\kappa} \omega^{\kappa \lambda \lambda} \partial_{\kappa} - \frac{1}{3} t_{1} \partial^{\alpha} f_{\alpha} \partial_{\kappa} f_{\alpha} + \frac{1}{6} t_{2} \partial^{\alpha} f_{\theta} \partial^{\kappa} f_{\alpha} \partial^{\kappa} f_{\alpha} + t_{1} \omega_{\kappa}^{\ \alpha} \partial^{\kappa} f_{\alpha} + \\ \\ \\ t_{2} \partial^{\alpha} f_{\kappa \theta} \partial^{\kappa} f_{\alpha}^{\ \theta} - \frac{1}{3} t_{1} \partial^{\alpha} f_{\lambda}^{\ \lambda} \partial^{\kappa} f_{\alpha \lambda} + \frac{1}{6} t_{2} \partial^{\alpha} f_{\lambda}^{\ \lambda} \partial^{\kappa} f_{\alpha \lambda} + t_{1} \omega_{\kappa}^{\ \alpha} \partial^{\kappa} f_{\beta}^{\ \prime} + \\ \\ \\ t_{2} \partial^{\alpha} f_{\kappa \theta} \partial^{\kappa} f_{\alpha}^{\ \theta} - \frac{1}{3} t_{1} \partial^{\alpha} f_{\kappa}^{\ \lambda} \partial^{\kappa} f_{\gamma}^{\ \prime} + \frac{1}{6} t_{2} \partial^{\alpha} f_{\lambda}^{\ \lambda} \partial^{\kappa} f_{\gamma}^{\ \prime} + t_{1} \omega_{\kappa}^{\ \alpha} \partial^{\kappa} f_{\beta}^{\ \prime} + \\ \\ \\ t_{2} \omega_{\lambda}^{\ \lambda} \partial^{\kappa} f_{\gamma}^{\ \prime} + 2 t_{1} \partial^{\alpha} f_{\kappa}^{\ \lambda} \partial^{\kappa} f_{\gamma}^{\ \prime} + \frac{1}{3} t_{1} \omega_{\beta}^{\ \prime} \partial^{\kappa} f_{\beta}^{\ \prime} + \\ \\ \end{array}$
$t_{2} \omega_{l\theta \kappa} \partial^{\kappa} f^{l\theta} + \frac{4}{3} t_{1} \omega_{l\kappa\theta} \partial^{\kappa} f^{l\theta} - \frac{2}{3} t_{2} \omega_{l\kappa\theta} \partial^{\kappa} f^{l\theta} - \frac{1}{3} t_{1} \omega_{\theta l\kappa} \partial^{\kappa} f^{l\theta} - \frac{1}{3} t_{1} \omega_{\theta l\kappa} \partial^{\kappa} f^{l\theta} - \frac{1}{3} t_{1} \omega_{\theta l\kappa} \partial^{\kappa} f^{l\theta} + \frac{2}{3} t_{2} \omega_{\theta \kappa_{l}} \partial^{\kappa} f^{l\theta} - t_{1} \omega_{l\alpha}^{\alpha} \partial^{\kappa} f^{l\kappa} - t_{1} \omega_{l\alpha}^{\alpha} \partial^{\kappa} f^{l\kappa} - t_{1} \partial^{\alpha} f^{k\kappa} \partial^{\kappa} f^{k\kappa} + t_{2} \partial^{\kappa} f^{k\kappa} \partial^{\kappa} f^{k\kappa} + t_{2} \partial^{\kappa} f^{k\kappa} \partial^{\kappa} f^{k\kappa} + t_{2} \partial^{\kappa} f^{k\kappa} \partial^{\kappa} f^{k\kappa} \partial^{\kappa} f^{k\kappa} \partial^{\kappa} f^{k\kappa} + t_{2} \partial^{\kappa} f^{k\kappa} \partial^{\kappa}$	$t_{2} \omega_{l\theta \kappa} \partial^{\kappa} f^{l\theta} + \frac{4}{3} t_{1} \omega_{l\kappa\theta} \partial^{\kappa} f^{l\theta} - \frac{2}{3} t_{2} \omega_{l\kappa\theta} \partial^{\kappa} f^{l\theta} - \frac{1}{3} t_{1} \omega_{\theta l\kappa} \partial^{\kappa} f^{l\theta} - \frac{1}{3} t_{1} \omega_{\theta l\kappa} \partial^{\kappa} f^{l\theta} - \frac{1}{3} t_{1} \omega_{\theta l\kappa} \partial^{\kappa} f^{l\theta} + \frac{2}{3} t_{2} \omega_{\theta \kappa} \partial^{\kappa} f^{l\theta} - t_{1} \omega_{l\alpha}^{\alpha} \partial^{\kappa} f^{k} - t_{1} \omega_{l\alpha}^{\alpha} \partial^{\kappa} f^{k} - t_{1} \omega_{l\alpha}^{\alpha} \partial^{\kappa} f^{k} - t_{1} \partial^{\kappa} f^{k} \partial^{\kappa} f^{k} \partial^{\kappa} f^{k} - t_{1} \partial^{\kappa} f^{k} \partial^$	$t_{2} \omega_{l\theta k} \partial^{k} f^{l\theta} + \frac{4}{3} t_{1} \omega_{lk\theta} \partial^{k} f^{l\theta} - \frac{2}{3} t_{2} \omega_{lk\theta} \partial^{k} f^{l\theta} - \frac{1}{3} t_{1} \omega_{\theta lk} \partial^{k} f^{l\theta} - t_{1} \omega_{\theta lk} \partial^{k} f^{l\theta} - t_{2} t_{2} \omega_{\theta k} \partial^{k} f^{l\theta} - t_{1} \omega_{l\alpha} \partial^{k} f^{l} - t_{2} \partial^{k} f^{l} + \frac{2}{3} t_{2} \omega_{\theta k} \partial^{k} f^{l\theta} - t_{1} \omega_{l\alpha} \partial^{k} f^{l} - t_{2} $		$t_2 \partial^{\alpha} f_{\kappa\theta} \partial^{\kappa} f_{\alpha}^{\ \theta} - \frac{1}{3} t_1 \partial^{\alpha} f^{\lambda}_{\ \kappa} \partial^{\kappa} f_{\alpha\lambda} + \frac{1}{6} t_2 \partial^{\alpha} f^{\lambda}_{\ \kappa} \partial^{\kappa} f_{\alpha\lambda} + t_1 \omega_{\kappa\alpha}^{\ \alpha} \partial^{\kappa} f'_{\ \gamma} +$	$r_1 \partial_{\theta} \omega_{\lambda}^{\alpha} \partial_{\kappa} \omega^{\kappa \lambda \theta} - \frac{1}{3} t_1 \partial^{\alpha} f_{\theta \kappa} \partial^{\kappa} f_{\alpha}^{\ \theta} + \frac{1}{6} t_2 \partial^{\alpha} f_{\theta \kappa} \partial^{\kappa} f_{\alpha}^{\ \theta} - \frac{2}{3} t_1 \partial^{\alpha} f_{\kappa \theta} \partial^{\kappa} f_{\alpha}^{\ \theta} - t_2 \partial^{\alpha} f_{\kappa \theta} \partial^{\kappa} f_{\kappa \theta} \partial^{\kappa} f_{\alpha} + t_1 \partial^{\alpha} f_{\alpha}^{\ \lambda} \partial^{\kappa} f_{\alpha \lambda} + t_1 \partial^{\alpha} f_{\alpha}^{\ \lambda} \partial^{\kappa} f_{\alpha \lambda} + t_1 \partial^{\alpha} f_{\alpha}^{\ \lambda} \partial^{\kappa} f_{\alpha \lambda} \partial^{\kappa} f_{\alpha \lambda} + t_2 \partial^{\alpha} f_{\alpha}^{\ \lambda} \partial^{\kappa} f_{\alpha \lambda} \partial^{\kappa} $	$r_{1} \partial_{\alpha} \omega_{\lambda}^{\alpha} \partial_{\beta} \omega^{\theta k \lambda} - 2 r_{1} \partial_{\theta} \omega_{\lambda}^{\alpha} \partial_{\kappa} \omega^{\theta k \lambda} + 2 r_{1} \partial_{\alpha} \omega_{\lambda}^{\alpha} \partial_{\kappa} \omega^{k \lambda \theta} -$ $r_{1} \partial_{\theta} \omega_{\lambda}^{\alpha} \partial_{\kappa} \omega^{k \lambda \theta} - \frac{1}{3} t_{1} \partial^{\alpha} f_{\theta k} \partial^{k} f_{\alpha}^{\alpha} + \frac{1}{6} t_{2} \partial^{\alpha} f_{\theta k} \partial^{k} f_{\alpha}^{\beta} - \frac{2}{3} t_{1} \partial^{\alpha} f_{k \theta} \partial^{k} f_{\alpha}^{\beta} -$ $t_{2} \partial^{\alpha} f_{k \theta} \partial^{k} f_{\alpha}^{\beta} - \frac{1}{3} t_{1} \partial^{\alpha} f^{\lambda} \partial^{k} f_{\alpha \lambda} + \frac{1}{6} t_{2} \partial^{\alpha} f^{\lambda} \partial^{k} f_{\alpha \lambda} + t_{1} \omega_{k \alpha}^{\alpha} \partial^{k} f'_{\lambda} +$	$r_{1}\partial^{\beta}\omega^{\theta\alpha}_{\kappa}\partial_{\theta}\omega_{\alpha\beta}^{\kappa} - \frac{2}{3}r_{1}\partial_{\theta}\omega_{\alpha\beta}^{\kappa}\partial_{\kappa}\omega^{\alpha\beta\theta} + \frac{2}{3}r_{1}\partial_{\theta}\omega_{\alpha\beta}^{\kappa}\partial_{\kappa}\omega^{\theta\alpha\beta} +$ $r_{1}\partial_{\alpha}\omega_{\lambda}^{\alpha}\partial_{\kappa}\omega^{\theta\kappa\lambda} - 2r_{1}\partial_{\theta}\omega_{\lambda}^{\alpha}\partial_{\kappa}\omega^{\theta\kappa\lambda} + 2r_{1}\partial_{\alpha}\omega_{\lambda}^{\alpha}\partial_{\kappa}\omega^{\kappa\lambda\theta} -$ $r_{1}\partial_{\theta}\omega_{\lambda}^{\alpha}\partial_{\kappa}\omega^{\kappa\lambda\theta} - \frac{1}{3}t_{1}\partial^{\alpha}f_{\theta\kappa}\partial^{\kappa}f_{\alpha}^{\theta} + \frac{1}{6}t_{2}\partial^{\alpha}f_{\theta\kappa}\partial^{\kappa}f_{\alpha}^{\theta} - \frac{2}{3}t_{1}\partial^{\alpha}f_{\kappa\theta}\partial^{\kappa}f_{\alpha}^{\theta} -$ $t_{2}\partial^{\alpha}f_{\kappa\theta}\partial^{\kappa}f_{\alpha}^{\theta} - \frac{1}{3}t_{1}\partial^{\alpha}f^{\lambda}\partial^{\kappa}f_{\alpha\lambda} + \frac{1}{6}t_{2}\partial^{\alpha}f^{\lambda}\partial^{\kappa}f_{\alpha\lambda} + t_{1}\omega_{\kappa\alpha}^{\alpha}\partial^{\kappa}f'_{\lambda} +$	$t_{2} \omega_{\kappa\lambda}^{\prime} \omega^{\kappa\lambda}_{,} + f^{\alpha\beta} \tau_{\alpha\beta} \tau_{\alpha\beta} \omega_{\alpha\beta\lambda} + 2 r_{1} \partial_{i} \omega^{\kappa\lambda}_{,\kappa} \partial^{i} \omega_{\lambda}^{\alpha} -$ $r_{1} \partial^{\beta} \omega^{\theta\alpha}_{\kappa} \partial_{\theta} \omega_{\alpha\beta}^{\ \ \ \ \ \ \ \ \ \ \ } - \frac{2}{3} r_{1} \partial_{\theta} \omega_{\alpha\beta}^{\ \ \ \ \ \ \ } + \frac{2}{3} r_{1} \partial_{\theta} \omega_{\alpha\beta}^{\ \ \ \ \ \ \ } + \frac{2}{3} r_{1} \partial_{\theta} \omega_{\alpha\beta}^{\ \ \ \ \ \ } + \frac{2}{3} r_{1} \partial_{\theta} \omega_{\lambda}^{\ \ \ \ \ \ \ } - \frac{2}{3} t_{1} \partial^{\alpha} f_{\kappa\theta}^{\ \ \ \ \ \ } - \frac{2}{3} t_{1} \partial^{\alpha} f_{\kappa\theta}^{\ \ \ \ \ \ \ } - \frac{2}{3} t_{1} \partial^{\alpha} f_{\kappa\theta}^{\ \ \ \ \ \ \ } - \frac{2}{3} t_{1} \partial^{\alpha} f_{\kappa\theta}^{\ \ \ \ \ \ \ \ } - \frac{2}{3} t_{1} \partial^{\alpha} f_{\kappa\theta}^{\ \ \ \ \ \ \ \ } - \frac{2}{3} t_{1} \partial^{\alpha} f_{\kappa\theta}^{\ \ \ \ \ \ \ \ } - \frac{2}{3} t_{1} \partial^{\alpha} f_{\kappa\theta}^{\ \ \ \ \ \ \ \ \ \ } - \frac{2}{3} t_{1} \partial^{\alpha} f_{\kappa\theta}^{\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	

$\tau_{1}^{\#2}{}_{\alpha}$	0	0	0	$\frac{2ik}{t_1 + 2k^2t_1}$	$\frac{i\sqrt{2} k(2k^2 r_1 + t_1)}{(t_1 + 2k^2 t_1)^2}$	0	$\frac{2k^2(2k^2r_1+t_1)}{(t_1+2k^2t_1)^2}$
$\tau_{1}^{\#1}{}_{\alpha}$	0	0	0	0	0	0	0
$\sigma_{1^-}^{\#2}$	0	0	0	$\frac{\sqrt{2}}{t_1 + 2 k^2 t_1}$	$\frac{2k^2r_1+t_1}{(t_1+2k^2t_1)^2}$	0	$-\frac{i\sqrt{2}k(2k^2r_1+t_1)}{(t_1+2k^2t_1)^2}$
$\sigma_{1}^{\#1}{}_{\alpha}$	0	0	0	0	$\frac{\sqrt{2}}{t_1 + 2k^2t_1}$	0	$-\frac{2ik}{t_1+2k^2t_1}$
$\tau_{1}^{\#1}_{\alpha\beta}$	$\frac{i\sqrt{2}k(t_1-2t_2)}{3(1+k^2)t_1t_2}$	$\frac{i k (t_1 + 4 t_2)}{3 (1 + k^2)^2 t_1 t_2}$	$\frac{k^2 (t_1 + 4t_2)}{3 (1 + k^2)^2 t_1 t_2}$	0	0	0	0
$\sigma_{1}^{\#2}$	$\frac{\sqrt{2} (t_1 - 2t_2)}{3 (1 + k^2) t_1 t_2}$	$\frac{t_1+4t_2}{3(1+k^2)^2t_1t_2}$	$-\frac{ik(t_1+4t_2)}{3(1+k^2)^2t_1t_2}$	0	0	0	0
$\sigma_{1}^{\#1}{}_{\alpha\beta}$		$\frac{\sqrt{2} (t_1 - 2t_2)}{3(1+k^2)t_1t_2}$	$-\frac{i\sqrt{2}k(t_1-2t_2)}{3(1+k^2)t_1t_2}$	0	0	0	0
	$\sigma_{1}^{\#1} + \alpha \beta$	$\sigma_{1}^{#2} + \alpha \beta$	$t_1^{\#1} + \alpha \beta$	$\sigma_{1}^{\#1} +^{lpha}$	$\sigma_1^{\#2} +^{\alpha}$	$\tau_{1}^{\#1} +^{\alpha}$	$\tau_1^{\#2} + \alpha$

$f_{1}^{#2}$	0	0	0	$i k t_1$	0	0	0
$\omega_{1}^{\#2}_{lpha}f_{1}^{\#1}_{lpha}$	0	0	0	0	0	0	0
$\omega_{1^{-}}^{\#2}{}_{lpha}$	0	0	0	$\frac{t_1}{\sqrt{2}}$	0	0	0
$\omega_{1^{^{-}}\alpha}^{\#1}$	0	0	0	$-k^2 r_1 - \frac{t_1}{2}$	$\frac{t_1}{\sqrt{2}}$	0	$-\bar{\imath} k t_1$
$f_{1}^{\#1}$	$-\frac{ik(t_1-2t_2)}{3\sqrt{2}}$	$\frac{1}{3}$ \vec{l} k $(t_1 + t_2)$	$\frac{1}{3} k^2 (t_1 + t_2)$	0	0	0	0
$\omega_{1}^{\#2}{}_{\alpha\beta}$	$-\frac{t_1-2t_2}{3\sqrt{2}}$	$\frac{t_1+t_2}{3}$	$-\frac{1}{3}ik(t_1+t_2)\left \frac{1}{3}k^2(t_1+t_2)\right $	0	0	0	0
$\omega_{1}^{\#1}{}_{\alpha\beta}$		$-\frac{t_1-2t_2}{3\sqrt{2}}$	$\frac{i k (t_1 - 2 t_2)}{3 \sqrt{2}}$	0	0	0	0
	$\omega_{1+}^{\#1} +^{lphaeta}$	$\omega_{1}^{\#2} + \alpha^{eta}$	$f_{1}^{\#1} + ^{\alpha \beta}$	$\omega_{1}^{\#1} +^{\alpha}$	$\omega_1^{\#2} +^{lpha}$	$f_{1^{\bar{-}}}^{\#1} \dagger^{\alpha}$	$f_1^{\#2} +^{\alpha}$

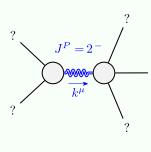




	$\omega_{2}^{\#1}{}_{lphaeta}$	$f_{2}^{\#1}{}_{lphaeta}$	$\omega_{2}^{\#1}{}_{\alpha\beta\chi}$
$\omega_{2}^{\#1} \dagger^{\alpha\beta}$	<u>t</u> 1 2	$-\frac{ikt_1}{\sqrt{2}}$	0
$f_{2+}^{#1} \dagger^{\alpha\beta}$	$\frac{i k t_1}{\sqrt{2}}$	$k^2 t_1$	0
$\omega_2^{\#1}$ † $^{lphaeta\chi}$	0	0	$k^2 r_1 + \frac{t_1}{2}$

	$\sigma_{0}^{\#1}$	$\tau_{0}^{\#1}$	$ au_{0}^{\#2}$	$\sigma_0^{\#1}$
$\sigma_{0}^{\#1}$ †	$-\frac{1}{(1+2k^2)^2t_1}$	$\frac{i\sqrt{2} k}{(1+2k^2)^2 t_1}$	0	0
$ au_{0}^{\#1}$ †	$-\frac{i\sqrt{2} k}{(1+2k^2)^2 t_1}$	$-\frac{2k^2}{(1+2k^2)^2t_1}$	0	0
$\tau_{0}^{\#2}$ †	0	0	0	0
$\sigma_0^{\#1}$ †	0	0	0	$\frac{1}{t_2}$

Source constraints	
SO(3) irreps	#
$\tau_{0^{+}}^{\#2} == 0$	1
$\tau_{0+}^{\#1} - 2 i k \sigma_{0+}^{\#1} == 0$	1
$\tau_1^{\#2\alpha} + 2 i k \sigma_1^{\#2\alpha} == 0$	თ
$\tau_{1}^{\#1\alpha} == 0$	3
$\tau_{1+}^{\#1}{}^{\alpha\beta} + ik \sigma_{1+}^{\#2}{}^{\alpha\beta} == 0$	3
$\tau_{2^{+}}^{\#1\alpha\beta}$ - 2 $ik\sigma_{2^{+}}^{\#1\alpha\beta}$ == 0	5
Total #:	16



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

(No massless particles)