$$-\frac{1}{12}\hbar\frac{1}{\epsilon}B^{\mu\nu2}-\frac{1}{4}\frac{1}{g_Y{}^2}B^{\mu\nu2}-\frac{1}{4}\frac{1}{g_s{}^2}G^{\mu\nu A2}-\frac{1}{4}\frac{1}{g_L{}^2}W^{\mu\nu I2}-\frac{1}{12}\hbar B^{\mu\nu2}\,\mathrm{Log}\left[\frac{\bar{\mu}^2}{M_\phi{}^2}\right]+D_\mu\bar{H}_i\,D_\mu H^i+C_{H^2}\bar{H}_i H^i+$$

$$\mathbb{i}\left(\bar{d}^r_a\cdot\gamma_\mu P_R\cdot D_\mu d^{ar}\right)+\mathbb{i}\left(\bar{e}^r\cdot\gamma_\mu P_R\cdot D_\mu e^r\right)+\mathbb{i}\left(\bar{l}^r_i\cdot\gamma_\mu P_L\cdot D_\mu l^{ir}\right)+\mathbb{i}\left(\bar{q}^r_{ai}\cdot\gamma_\mu P_L\cdot D_\mu q^{air}\right)+$$

$$\mathbb{i}\left(\bar{u}^r_a\cdot\gamma_\mu P_R\cdot D_\mu u^{ar}\right)-\frac{1}{2}\lambda\bar{H}_i\bar{H}_j H^i H^j+\frac{1}{2}\hbar\frac{1}{\epsilon}\lambda_{H\chi}{}^2\bar{H}_i\bar{H}_j H^i H^j+\frac{1}{2}\hbar\lambda_{H\chi}{}^2\bar{H}_i\bar{H}_j H^i H^j\,\mathrm{Log}\left[\frac{\bar{\mu}^2}{M_\phi{}^2}\right]-$$

$$\overline{Y_d}^{pr}\bar{H}_i\left(\bar{d}^r_a\cdot P_L\cdot q^{aip}\right)-\overline{Y_e}^{pr}\bar{H}_i\left(\bar{e}^r\cdot P_L\cdot l^{ip}\right)-\frac{1}{8}\hbar\overline{Y_e}^{ps}\overline{\lambda_{\psi\chi}}^{st}\lambda_{\psi\chi}{}^{rt}\bar{H}_i\left(\bar{e}^r\cdot P_L\cdot l^{ip}\right)+$$

$$\frac{1}{4}\hbar\frac{1}{\epsilon}\overline{Y_e}^{ps}\overline{\lambda_{\psi\chi}}^{st}\lambda_{\psi\chi}{}^{rt}\bar{H}_i\left(\bar{e}^r\cdot P_L\cdot l^{ip}\right)+\frac{1}{2}\hbar\overline{Y_e}^{ps}\overline{\lambda_{\psi\chi}}^{st}\lambda_{\psi\chi}{}^{rt}\mathrm{LF}_{1,1,0}\left[M_\phi,M_\chi{}^t\right]\bar{H}_i\left(\bar{e}^r\cdot P_L\cdot l^{ip}\right)-$$

$$\frac{1}{4}\hbar\overline{Y_e}^{ps}\overline{\lambda_{\psi\chi}}^{st}\lambda_{\psi\chi}{}^{rt}\mathrm{LF}_{2,1,-1}\left[M_\chi{}^t,M_\phi\right]\bar{H}_i\left(\bar{e}^r\cdot P_L\cdot l^{ip}\right)-Y_e{}^{rp}H^i\left(\bar{l}^r_i\cdot P_R\cdot e^p\right)-$$

$$\frac{1}{8}\hbar Y_e{}^{rt}\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{ts}H^i\left(\bar{l}^r_i\cdot P_R\cdot e^p\right)+\frac{1}{4}\hbar\frac{1}{\epsilon}Y_e{}^{rt}\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{ts}H^i\left(\bar{l}^r_i\cdot P_R\cdot e^p\right)+$$

$$\frac{1}{2}\hbar Y_e{}^{rt}\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{ts}\mathrm{LF}_{1,1,0}\left[M_\phi,M_\chi{}^s\right]H^i\left(\bar{l}^r_i\cdot P_R\cdot e^p\right)-$$

$$\frac{1}{4}\hbar Y_e{}^{rt}\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{ts}\mathrm{LF}_{2,1,-1}\left[M_\chi{}^s,M_\phi\right]H^i\left(\bar{l}^r_i\cdot P_R\cdot e^p\right)-Y_d{}^{rp}H^i\left(\bar{q}^r_{ai}\cdot P_R\cdot d^{ap}\right)-$$

$$Y_u{}^{rp}\bar{H}_i\left(\bar{q}^r_{aj}\cdot P_R\cdot u^{ap}\right)\varepsilon^{ji}-\overline{Y_u}^{pr}H^j\left(\bar{u}^r_a\cdot P_L\cdot q^{aip}\right)\bar{\varepsilon}_{ij}-\frac{1}{120}\hbar C_{H^2}g_Y{}^4\frac{1}{M_\phi{}^2}\bar{H}_i\bar{H}_j H^i H^j-$$

$$\frac{1}{6}\hbar C_{H^2}\frac{1}{M_\phi{}^2}\lambda_{H\chi}{}^2\bar{H}_i\bar{H}_j H^i H^j+\frac{1}{120}\hbar\lambda g_Y{}^4\frac{1}{M_\phi{}^2}\bar{H}_i\bar{H}_j\bar{H}_k H^i H^j H^k+$$

$$\frac{1}{6}\hbar\lambda\frac{1}{M_\phi{}^2}\lambda_{H\chi}{}^2\bar{H}_i\bar{H}_j\bar{H}_k H^i H^j H^k+\frac{1}{6}\hbar\frac{1}{M_\phi{}^2}\lambda_{H\chi}{}^3\bar{H}_i\bar{H}_j\bar{H}_k H^i H^j H^k-\frac{1}{60}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}D_\mu\bar{H}_i\bar{H}_j H^i D_\mu H^j-$$

$$\frac{1}{120}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\bar{H}_i D_\mu\bar{H}_j H^i D_\mu H^j-\frac{1}{6}\hbar\frac{1}{M_\phi{}^2}\lambda_{H\chi}{}^2\bar{H}_i D_\mu\bar{H}_j H^i D_\mu H^j-\frac{1}{12}\hbar\lambda_{H\chi}\frac{1}{M_\phi{}^2}\bar{H}_i H^i B^{\mu\nu2}+$$

$$\frac{1}{240}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\overline{Y_d}^{pr}\bar{H}_i\bar{H}_j H^i\left(\bar{d}^r_a\cdot P_L\cdot q^{ajp}\right)+\frac{1}{12}\hbar\frac{1}{M_\phi{}^2}\lambda_{H\chi}{}^2\overline{Y_d}^{pr}\bar{H}_i\bar{H}_j H^i\left(\bar{d}^r_a\cdot P_L\cdot q^{ajp}\right)+$$

$$\frac{1}{240}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\overline{Y_e}^{pr}\bar{H}_i\bar{H}_j H^i\left(\bar{e}^r\cdot P_L\cdot l^{jp}\right)+\frac{1}{12}\hbar\frac{1}{M_\phi{}^2}\lambda_{H\chi}{}^2\overline{Y_e}^{pr}\bar{H}_i\bar{H}_j H^i\left(\bar{e}^r\cdot P_L\cdot l^{jp}\right)-$$

$$\frac{1}{2}\hbar\lambda_{H\chi}\overline{Y_e}^{ps}\overline{\lambda_{\psi\chi}}^{st}\lambda_{\psi\chi}{}^{rt}\mathrm{LF}_{2,1,0}\left[M_\phi,M_\chi{}^t\right]\bar{H}_i\bar{H}_j H^i\left(\bar{e}^r\cdot P_L\cdot l^{jp}\right)+$$

$$\frac{1}{4}\hbar\lambda_{H\chi}\overline{Y_e}^{ps}\overline{\lambda_{\psi\chi}}^{st}\lambda_{\psi\chi}{}^{rt}\mathrm{LF}_{2,2,-1}\left[M_\phi,M_\chi{}^t\right]\bar{H}_i\bar{H}_j H^i\left(\bar{e}^r\cdot P_L\cdot l^{jp}\right)-$$

$$\frac{1}{2}\hbar\overline{Y_e}^{ps}\overline{Y_e}^{tr}Y_e{}^{tv}\overline{\lambda_{\psi\chi}}^{su}\lambda_{\psi\chi}{}^{vu}\mathrm{LF}_{2,1,0}\left[M_\chi{}^u,M_\phi\right]\bar{H}_i\bar{H}_j H^i\left(\bar{e}^r\cdot P_L\cdot l^{jp}\right)+$$

$$\hbar\overline{Y_e}^{ps}\overline{Y_e}^{tr}Y_e{}^{tv}\overline{\lambda_{\psi\chi}}^{su}\lambda_{\psi\chi}{}^{vu}\mathrm{LF}_{3,1,-1}\left[M_\chi{}^u,M_\phi\right]\bar{H}_i\bar{H}_j H^i\left(\bar{e}^r\cdot P_L\cdot l^{jp}\right)-$$

$$\frac{1}{2}\hbar\overline{Y_e}^{ps}\overline{Y_e}^{tr}Y_e{}^{tv}\overline{\lambda_{\psi\chi}}^{su}\lambda_{\psi\chi}{}^{vu}\mathrm{LF}_{4,1,-2}\left[M_\chi{}^u,M_\phi\right]\bar{H}_i\bar{H}_j H^i\left(\bar{e}^r\cdot P_L\cdot l^{jp}\right)+$$

$$\frac{1}{240}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}Y_e{}^{rp}\bar{H}_i H^i H^j\left(\bar{l}^r_j\cdot P_R\cdot e^p\right)+\frac{1}{12}\hbar\frac{1}{M_\phi{}^2}\lambda_{H\chi}{}^2Y_e{}^{rp}\bar{H}_i H^i H^j\left(\bar{l}^r_j\cdot P_R\cdot e^p\right)-$$

$$\frac{1}{2}\hbar\lambda_{H\chi}Y_e{}^{rt}\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{ts}\mathrm{LF}_{2,1,0}\left[M_\phi,M_\chi{}^s\right]\bar{H}_i H^i H^j\left(\bar{l}^r_j\cdot P_R\cdot e^p\right)+$$

$$\frac{1}{4}\hbar\lambda_{H\chi}Y_e{}^{rt}\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{ts}\mathrm{LF}_{2,2,-1}\left[M_\phi,M_\chi{}^s\right]\bar{H}_i H^i H^j\left(\bar{l}^r_j\cdot P_R\cdot e^p\right)-$$

$$\frac{1}{2}\hbar\overline{Y_e}^{st}Y_e{}^{rv}Y_e{}^{sp}\overline{\lambda_{\psi\chi}}^{tu}\lambda_{\psi\chi}{}^{vu}\mathrm{LF}_{2,1,0}\left[M_\chi{}^u,M_\phi\right]\bar{H}_i H^i H^j\left(\bar{l}^r_j\cdot P_R\cdot e^p\right)+$$

$$\hbar\overline{Y_e}^{st}Y_e{}^{rv}Y_e{}^{sp}\overline{\lambda_{\psi\chi}}^{tu}\lambda_{\psi\chi}{}^{vu}\mathrm{LF}_{3,1,-1}\left[M_\chi{}^u,M_\phi\right]\bar{H}_i H^i H^j\left(\bar{l}^r_j\cdot P_R\cdot e^p\right)-$$

$$\frac{1}{2}\hbar\overline{Y_e}^{st}Y_e{}^{rv}Y_e{}^{sp}\overline{\lambda_{\psi\chi}}^{tu}\lambda_{\psi\chi}{}^{vu}\mathrm{LF}_{4,1,-2}\left[M_\chi{}^u,M_\phi\right]\bar{H}_i H^i H^j\left(\bar{l}^r_j\cdot P_R\cdot e^p\right)+$$

$$\frac{1}{240}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}Y_d{}^{rp}\bar{H}_i H^i H^j\left(\bar{q}^r_{aj}\cdot P_R\cdot d^{ap}\right)+\frac{1}{12}\hbar\frac{1}{M_\phi{}^2}\lambda_{H\chi}{}^2Y_d{}^{rp}\bar{H}_i H^i H^j\left(\bar{q}^r_{aj}\cdot P_R\cdot d^{ap}\right)+$$

$$\frac{1}{240}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}Y_u{}^{rp}\bar{H}_i\bar{H}_j H^i\left(\bar{q}^r_{ak}\cdot P_R\cdot u^{ap}\right)\varepsilon^{kj}+\frac{1}{12}\hbar\frac{1}{M_\phi{}^2}\lambda_{H\chi}{}^2Y_u{}^{rp}\bar{H}_i\bar{H}_j H^i\left(\bar{q}^r_{ak}\cdot P_R\cdot u^{ap}\right)\varepsilon^{kj}+$$

$$\frac{1}{240}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\overline{Y_u}^{pr}\bar{H}_i H^i H^k\left(\bar{u}^r_a\cdot P_L\cdot q^{ajp}\right)\bar{\varepsilon}_{jk}+\frac{1}{12}\hbar\frac{1}{M_\phi{}^2}\lambda_{H\chi}{}^2\overline{Y_u}^{pr}\bar{H}_i H^i H^k\left(\bar{u}^r_a\cdot P_L\cdot q^{ajp}\right)\bar{\varepsilon}_{jk}-$$

$$\frac{\mathbb{i}}{180}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}D_\mu\bar{H}_i H^i\left(\bar{d}^r_a\cdot\gamma_\mu P_R\cdot d^{ar}\right)+\frac{\mathbb{i}}{180}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\bar{H}_i D_\mu H^i\left(\bar{d}^r_a\cdot\gamma_\mu P_R\cdot d^{ar}\right)-$$

$$\frac{\mathbb{i}}{60}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\delta_{pr}D_\mu\bar{H}_i H^i\left(\bar{e}^r\cdot\gamma_\mu P_R\cdot e^p\right)+\frac{\mathbb{i}}{60}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\delta_{pr}\bar{H}_i D_\mu H^i\left(\bar{e}^r\cdot\gamma_\mu P_R\cdot e^p\right)-$$

$$\frac{\mathbb{i}}{6}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{rs}\mathrm{LF}_{2,1,0}\left[M_\phi,M_\chi{}^s\right]D_\mu\bar{H}_i H^i\left(\bar{e}^r\cdot\gamma_\mu P_R\cdot e^p\right)+$$

$$\frac{\mathbb{i}}{6}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{rs}\mathrm{LF}_{2,1,0}\left[M_\phi,M_\chi{}^s\right]\bar{H}_i D_\mu H^i\left(\bar{e}^r\cdot\gamma_\mu P_R\cdot e^p\right)+$$

$$\frac{\mathbb{i}}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{rs}\mathrm{LF}_{2,2,-1}\left[M_\phi,M_\chi{}^s\right]D_\mu\bar{H}_i H^i\left(\bar{e}^r\cdot\gamma_\mu P_R\cdot e^p\right)-$$

$$\frac{\mathbb{i}}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{rs}\mathrm{LF}_{2,2,-1}\left[M_\phi,M_\chi{}^s\right]\bar{H}_i D_\mu H^i\left(\bar{e}^r\cdot\gamma_\mu P_R\cdot e^p\right)+$$

$$\frac{\mathbb{i}}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{rs}\mathrm{LF}_{3,1,-1}\left[M_\phi,M_\chi{}^s\right]D_\mu\bar{H}_i H^i\left(\bar{e}^r\cdot\gamma_\mu P_R\cdot e^p\right)-$$

$$\frac{\mathbb{i}}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{rs}\mathrm{LF}_{3,1,-1}\left[M_\phi,M_\chi{}^s\right]\bar{H}_i D_\mu H^i\left(\bar{e}^r\cdot\gamma_\mu P_R\cdot e^p\right)+$$

$$\frac{\mathbb{i}}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{rs}\mathrm{LF}_{2,1,0}\left[M_\chi{}^s,M_\phi\right]D_\mu\bar{H}_i H^i\left(\bar{e}^r\cdot\gamma_\mu P_R\cdot e^p\right)-$$

$$\frac{\mathbb{i}}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{rs}\mathrm{LF}_{2,1,0}\left[M_\chi{}^s,M_\phi\right]\bar{H}_i D_\mu H^i\left(\bar{e}^r\cdot\gamma_\mu P_R\cdot e^p\right)-$$

$$\frac{\mathbb{i}}{6}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{rs}\mathrm{LF}_{3,1,-1}\left[M_\chi{}^s,M_\phi\right]D_\mu\bar{H}_i H^i\left(\bar{e}^r\cdot\gamma_\mu P_R\cdot e^p\right)+$$

$$\frac{\mathbb{i}}{6}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{rs}\mathrm{LF}_{3,1,-1}\left[M_\chi{}^s,M_\phi\right]\bar{H}_i D_\mu H^i\left(\bar{e}^r\cdot\gamma_\mu P_R\cdot e^p\right)+$$

$$\frac{\mathbb{i}}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{rs}\mathrm{LF}_{4,1,-2}\left[M_\chi{}^s,M_\phi\right]D_\mu\bar{H}_i H^i\left(\bar{e}^r\cdot\gamma_\mu P_R\cdot e^p\right)-$$

$$\frac{\mathbb{i}}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{rs}\mathrm{LF}_{4,1,-2}\left[M_\chi{}^s,M_\phi\right]\bar{H}_i D_\mu H^i\left(\bar{e}^r\cdot\gamma_\mu P_R\cdot e^p\right)-$$

$$\frac{\mathbb{i}}{2}\hbar\overline{Y_e}^{ps}Y_e{}^{ru}\overline{\lambda_{\psi\chi}}^{st}\lambda_{\psi\chi}{}^{ut}\mathrm{LF}_{2,1,0}\left[M_\chi{}^t,M_\phi\right]D_\mu\bar{H}_i H^j\left(\bar{l}^r_j\cdot\gamma_\mu P_L\cdot l^{ip}\right)+$$

$$\frac{\mathbb{i}}{2}\hbar\overline{Y_e}^{ps}Y_e{}^{ru}\overline{\lambda_{\psi\chi}}^{st}\lambda_{\psi\chi}{}^{ut}\mathrm{LF}_{2,1,0}\left[M_\chi{}^t,M_\phi\right]\bar{H}_i D_\mu H^j\left(\bar{l}^r_j\cdot\gamma_\mu P_L\cdot l^{ip}\right)+$$

$$\mathbb{i}\hbar\overline{Y_e}^{ps}Y_e{}^{ru}\overline{\lambda_{\psi\chi}}^{st}\lambda_{\psi\chi}{}^{ut}\mathrm{LF}_{3,1,-1}\left[M_\chi{}^t,M_\phi\right]D_\mu\bar{H}_i H^j\left(\bar{l}^r_j\cdot\gamma_\mu P_L\cdot l^{ip}\right)-$$

$$\mathbb{i}\hbar\overline{Y_e}^{ps}Y_e{}^{ru}\overline{\lambda_{\psi\chi}}^{st}\lambda_{\psi\chi}{}^{ut}\mathrm{LF}_{3,1,-1}\left[M_\chi{}^t,M_\phi\right]\bar{H}_i D_\mu H^j\left(\bar{l}^r_j\cdot\gamma_\mu P_L\cdot l^{ip}\right)-$$

$$\frac{\mathbb{i}}{2}\hbar\overline{Y_e}^{ps}Y_e{}^{ru}\overline{\lambda_{\psi\chi}}^{st}\lambda_{\psi\chi}{}^{ut}\mathrm{LF}_{4,1,-2}\left[M_\chi{}^t,M_\phi\right]D_\mu\bar{H}_i H^j\left(\bar{l}^r_j\cdot\gamma_\mu P_L\cdot l^{ip}\right)+$$

$$\frac{\mathbb{i}}{2}\hbar\overline{Y_e}^{ps}Y_e{}^{ru}\overline{\lambda_{\psi\chi}}^{st}\lambda_{\psi\chi}{}^{ut}\mathrm{LF}_{4,1,-2}\left[M_\chi{}^t,M_\phi\right]\bar{H}_i D_\mu H^j\left(\bar{l}^r_j\cdot\gamma_\mu P_L\cdot l^{ip}\right)-$$

$$\frac{\mathbb{i}}{120}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}D_\mu\bar{H}_i H^i\left(\bar{l}^r_j\cdot\gamma_\mu P_L\cdot l^{jr}\right)+\frac{\mathbb{i}}{120}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\bar{H}_i D_\mu H^i\left(\bar{l}^r_j\cdot\gamma_\mu P_L\cdot l^{jr}\right)+$$

$$\frac{\mathbb{i}}{360}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}D_\mu\bar{H}_i H^i\left(\bar{q}^r_{aj}\cdot\gamma_\mu P_L\cdot q^{ajr}\right)-\frac{\mathbb{i}}{360}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\bar{H}_i D_\mu H^i\left(\bar{q}^r_{aj}\cdot\gamma_\mu P_L\cdot q^{ajr}\right)+$$

$$\frac{\mathbb{i}}{90}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}D_\mu\bar{H}_i H^i\left(\bar{u}^r_a\cdot\gamma_\mu P_R\cdot u^{ar}\right)-\frac{\mathbb{i}}{90}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\bar{H}_i D_\mu H^i\left(\bar{u}^r_a\cdot\gamma_\mu P_R\cdot u^{ar}\right)-$$

$$\frac{\mathbb{i}}{4}\hbar\overline{Y_e}^{ps}\overline{\lambda_{\psi\chi}}^{st}\lambda_{\psi\chi}{}^{rt}\mathrm{LF}_{2,1,0}\left[M_\chi{}^t,M_\phi\right]\bar{H}_i B^{\mu\nu}\left(\bar{e}^r\cdot\Gamma_{\mu\nu}P_L\cdot l^{ip}\right)+$$

$$\frac{\mathbb{i}}{2}\hbar\overline{Y_e}^{ps}\overline{\lambda_{\psi\chi}}^{st}\lambda_{\psi\chi}{}^{rt}\mathrm{LF}_{3,1,-1}\left[M_\chi{}^t,M_\phi\right]\bar{H}_i B^{\mu\nu}\left(\bar{e}^r\cdot\Gamma_{\mu\nu}P_L\cdot l^{ip}\right)-$$

$$\frac{\mathbb{i}}{4}\hbar\overline{Y_e}^{ps}\overline{\lambda_{\psi\chi}}^{st}\lambda_{\psi\chi}{}^{rt}\mathrm{LF}_{4,1,-2}\left[M_\chi{}^t,M_\phi\right]\bar{H}_i B^{\mu\nu}\left(\bar{e}^r\cdot\Gamma_{\mu\nu}P_L\cdot l^{ip}\right)-$$

$$\frac{\mathbb{i}}{4}\hbar Y_e{}^{rt}\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{ts}\mathrm{LF}_{2,1,0}\left[M_\chi{}^s,M_\phi\right]H^i B^{\mu\nu}\left(\bar{l}^r_i\cdot\Gamma_{\mu\nu}P_R\cdot e^p\right)+$$

$$\frac{\mathbb{i}}{2}\hbar Y_e{}^{rt}\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{ts}\mathrm{LF}_{3,1,-1}\left[M_\chi{}^s,M_\phi\right]H^i B^{\mu\nu}\left(\bar{l}^r_i\cdot\Gamma_{\mu\nu}P_R\cdot e^p\right)-$$

$$\frac{\mathbb{i}}{4}\hbar Y_e{}^{rt}\overline{\lambda_{\psi\chi}}^{ps}\lambda_{\psi\chi}{}^{ts}\mathrm{LF}_{4,1,-2}\left[M_\chi{}^s,M_\phi\right]H^i B^{\mu\nu}\left(\bar{l}^r_i\cdot\Gamma_{\mu\nu}P_R\cdot e^p\right)-$$

$$\frac{1}{540}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\left(\bar{d}^s_a\cdot\gamma_\mu P_R\cdot d^{as}\right)\left(\bar{d}^t_b\cdot\gamma_\mu P_R\cdot d^{bt}\right)-$$

$$\frac{1}{120}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\delta_{ps}\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^r\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^p\right)-$$

$$\frac{1}{6}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{2,1,0}\left[M_\phi,M_\chi{}^u\right]\delta_{ps}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^r\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^p\right)+$$

$$\frac{1}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{2,2,-1}\left[M_\phi,M_\chi{}^u\right]\delta_{ps}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^r\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^p\right)+$$

$$\frac{1}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{3,1,-1}\left[M_\phi,M_\chi{}^u\right]\delta_{ps}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^r\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^p\right)+$$

$$\frac{1}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{2,1,0}\left[M_\chi{}^u,M_\phi\right]\delta_{ps}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^r\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^p\right)-$$

$$\frac{1}{6}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{3,1,-1}\left[M_\chi{}^u,M_\phi\right]\delta_{ps}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^r\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^p\right)+$$

$$\frac{1}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{4,1,-2}\left[M_\chi{}^u,M_\phi\right]\delta_{ps}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^r\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^p\right)+$$

$$\frac{1}{16}\hbar\overline{\lambda_{\psi\chi}}^{pu}\overline{\lambda_{\psi\chi}}^{rv}\lambda_{\psi\chi}{}^{su}\lambda_{\psi\chi}{}^{tv}\mathrm{LF}_{2,1,1,-1}\left[M_\phi,M_\chi{}^u,M_\chi{}^v\right]\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^r\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^p\right)-$$

$$\frac{1}{90}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\delta_{ps}\delta_{rt}\left(\bar{d}^s_a\cdot\gamma_\mu P_R\cdot d^{ap}\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^r\right)-$$

$$\frac{1}{9}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{2,1,0}\left[M_\phi,M_\chi{}^u\right]\delta_{ps}\left(\bar{d}^s_a\cdot\gamma_\mu P_R\cdot d^{ap}\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^r\right)+$$

$$\frac{1}{18}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{2,2,-1}\left[M_\phi,M_\chi{}^u\right]\delta_{ps}\left(\bar{d}^s_a\cdot\gamma_\mu P_R\cdot d^{ap}\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^r\right)+$$

$$\frac{1}{18}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{3,1,-1}\left[M_\phi,M_\chi{}^u\right]\delta_{ps}\left(\bar{d}^s_a\cdot\gamma_\mu P_R\cdot d^{ap}\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^r\right)+$$

$$\frac{1}{18}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{2,1,0}\left[M_\chi{}^u,M_\phi\right]\delta_{ps}\left(\bar{d}^s_a\cdot\gamma_\mu P_R\cdot d^{ap}\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^r\right)-$$

$$\frac{1}{9}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{3,1,-1}\left[M_\chi{}^u,M_\phi\right]\delta_{ps}\left(\bar{d}^s_a\cdot\gamma_\mu P_R\cdot d^{ap}\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^r\right)+$$

$$\frac{1}{18}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{4,1,-2}\left[M_\chi{}^u,M_\phi\right]\delta_{ps}\left(\bar{d}^s_a\cdot\gamma_\mu P_R\cdot d^{ap}\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^r\right)-$$

$$\frac{1}{120}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\delta_{ps}\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^r\right)+$$

$$\frac{1}{6}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{2,1,0}\left[M_\phi,M_\chi{}^u\right]\delta_{ps}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^r\right)+$$

$$\frac{1}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{2,2,-1}\left[M_\phi,M_\chi{}^u\right]\delta_{ps}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^r\right)+$$

$$\frac{1}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{3,1,-1}\left[M_\phi,M_\chi{}^u\right]\delta_{ps}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^r\right)+$$

$$\frac{1}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{2,1,0}\left[M_\chi{}^u,M_\phi\right]\delta_{ps}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^r\right)-$$

$$\frac{1}{6}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{3,1,-1}\left[M_\chi{}^u,M_\phi\right]\delta_{ps}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^r\right)+$$

$$\frac{1}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{ru}\lambda_{\psi\chi}{}^{tu}\mathrm{LF}_{4,1,-2}\left[M_\chi{}^u,M_\phi\right]\delta_{ps}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^r\right)+$$

$$\frac{1}{16}\hbar\overline{\lambda_{\psi\chi}}^{pu}\overline{\lambda_{\psi\chi}}^{rv}\lambda_{\psi\chi}{}^{su}\lambda_{\psi\chi}{}^{tv}\mathrm{LF}_{2,1,1,-1}\left[M_\phi,M_\chi{}^u,M_\chi{}^v\right]\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{e}^t\cdot\gamma_\mu P_R\cdot e^r\right)-$$

$$\frac{1}{60}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\delta_{ps}\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{l}^t_i\cdot\gamma_\mu P_L\cdot l^{ir}\right)-$$

$$\frac{1}{6}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{2,1,0}\left[M_\phi,M_\chi{}^u\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{l}^t_i\cdot\gamma_\mu P_L\cdot l^{ir}\right)+$$

$$\frac{1}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{2,2,-1}\left[M_\phi,M_\chi{}^u\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{l}^t_i\cdot\gamma_\mu P_L\cdot l^{ir}\right)+$$

$$\frac{1}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{3,1,-1}\left[M_\phi,M_\chi{}^u\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{l}^t_i\cdot\gamma_\mu P_L\cdot l^{ir}\right)+$$

$$\frac{1}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{2,1,0}\left[M_\chi{}^u,M_\phi\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{l}^t_i\cdot\gamma_\mu P_L\cdot l^{ir}\right)-$$

$$\frac{1}{6}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{3,1,-1}\left[M_\chi{}^u,M_\phi\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{l}^t_i\cdot\gamma_\mu P_L\cdot l^{ir}\right)+$$

$$\frac{1}{12}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{4,1,-2}\left[M_\chi{}^u,M_\phi\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{l}^t_i\cdot\gamma_\mu P_L\cdot l^{ir}\right)-$$

$$\frac{1}{180}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\left(\bar{d}^s_a\cdot\gamma_\mu P_R\cdot d^{as}\right)\left(\bar{l}^t_i\cdot\gamma_\mu P_L\cdot l^{it}\right)-$$

$$\frac{1}{240}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\left(\bar{l}^s_i\cdot\gamma_\mu P_L\cdot l^{is}\right)\left(\bar{l}^t_j\cdot\gamma_\mu P_L\cdot l^{jt}\right)+$$

$$\frac{1}{180}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\delta_{ps}\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{q}^t_{ai}\cdot\gamma_\mu P_L\cdot q^{air}\right)+$$

$$\frac{1}{18}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{2,1,0}\left[M_\phi,M_\chi{}^u\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{q}^t_{ai}\cdot\gamma_\mu P_L\cdot q^{air}\right)-$$

$$\frac{1}{36}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{2,2,-1}\left[M_\phi,M_\chi{}^u\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{q}^t_{ai}\cdot\gamma_\mu P_L\cdot q^{air}\right)-$$

$$\frac{1}{36}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{3,1,-1}\left[M_\phi,M_\chi{}^u\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{q}^t_{ai}\cdot\gamma_\mu P_L\cdot q^{air}\right)-$$

$$\frac{1}{36}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{2,1,0}\left[M_\chi{}^u,M_\phi\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{q}^t_{ai}\cdot\gamma_\mu P_L\cdot q^{air}\right)+$$

$$\frac{1}{18}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{3,1,-1}\left[M_\chi{}^u,M_\phi\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{q}^t_{ai}\cdot\gamma_\mu P_L\cdot q^{air}\right)-$$

$$\frac{1}{36}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{4,1,-2}\left[M_\chi{}^u,M_\phi\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{q}^t_{ai}\cdot\gamma_\mu P_L\cdot q^{air}\right)+$$

$$\frac{1}{360}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\left(\bar{l}^s_i\cdot\gamma_\mu P_L\cdot l^{is}\right)\left(\bar{q}^t_{aj}\cdot\gamma_\mu P_L\cdot q^{ajt}\right)+$$

$$\frac{1}{540}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\left(\bar{d}^s_a\cdot\gamma_\mu P_R\cdot d^{as}\right)\left(\bar{q}^t_{bi}\cdot\gamma_\mu P_L\cdot q^{bit}\right)-$$

$$\frac{1}{2160}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\left(\bar{q}^s_{ai}\cdot\gamma_\mu P_L\cdot q^{ais}\right)\left(\bar{q}^t_{bj}\cdot\gamma_\mu P_L\cdot q^{bjt}\right)+$$

$$\frac{1}{45}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\delta_{ps}\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{u}^t_a\cdot\gamma_\mu P_R\cdot u^{ar}\right)+$$

$$\frac{2}{9}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{2,1,0}\left[M_\phi,M_\chi{}^u\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{u}^t_a\cdot\gamma_\mu P_R\cdot u^{ar}\right)-$$

$$\frac{1}{9}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{2,2,-1}\left[M_\phi,M_\chi{}^u\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{u}^t_a\cdot\gamma_\mu P_R\cdot u^{ar}\right)-$$

$$\frac{1}{9}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{3,1,-1}\left[M_\phi,M_\chi{}^u\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{u}^t_a\cdot\gamma_\mu P_R\cdot u^{ar}\right)-$$

$$\frac{1}{9}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{2,1,0}\left[M_\chi{}^u,M_\phi\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{u}^t_a\cdot\gamma_\mu P_R\cdot u^{ar}\right)+$$

$$\frac{2}{9}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{3,1,-1}\left[M_\chi{}^u,M_\phi\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{u}^t_a\cdot\gamma_\mu P_R\cdot u^{ar}\right)-$$

$$\frac{1}{9}\hbar g_Y{}^2\overline{\lambda_{\psi\chi}}^{pu}\lambda_{\psi\chi}{}^{su}\mathrm{LF}_{4,1,-2}\left[M_\chi{}^u,M_\phi\right]\delta_{rt}\left(\bar{e}^s\cdot\gamma_\mu P_R\cdot e^p\right)\left(\bar{u}^t_a\cdot\gamma_\mu P_R\cdot u^{ar}\right)+$$

$$\frac{1}{90}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\left(\bar{l}^s_i\cdot\gamma_\mu P_L\cdot l^{is}\right)\left(\bar{u}^t_a\cdot\gamma_\mu P_R\cdot u^{at}\right)+\frac{1}{135}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\left(\bar{d}^s_a\cdot\gamma_\mu P_R\cdot d^{as}\right)\left(\bar{u}^t_b\cdot\gamma_\mu P_R\cdot u^{bt}\right)-$$

$$\frac{1}{270}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\left(\bar{q}^s_{ai}\cdot\gamma_\mu P_L\cdot q^{ais}\right)\left(\bar{u}^t_b\cdot\gamma_\mu P_R\cdot u^{bt}\right)-$$

$$\frac{1}{135}\hbar g_Y{}^4\frac{1}{M_\phi{}^2}\left(\bar{u}^s_a\cdot\gamma_\mu P_R\cdot u^{as}\right)\left(\bar{u}^t_b\cdot\gamma_\mu P_R\cdot u^{bt}\right)$$