$-\frac{1}{2}\partial_{\nu}g^{a}_{\mu}\partial_{\nu}g^{a}_{\mu} - g_{s}f^{abc}\partial_{\mu}g^{a}_{\nu}g^{b}_{\mu}g^{c}_{\nu} - \frac{1}{4}g^{2}_{s}f^{abc}f^{ade}g^{b}_{\mu}g^{c}_{\nu}g^{d}_{\mu}g^{e}_{\nu} + \frac{1}{2}ig^{2}_{s}(\bar{q}^{\sigma}_{i}\gamma^{\mu}q^{\sigma}_{i})g^{a}_{\mu} +$ $\bar{G}^{\tilde{a}}\partial^{2}\bar{G}^{a} + \bar{g}_{s}f^{abc}\partial_{\mu}\bar{G}^{a}G^{b}g_{\mu}^{c} - \partial_{\nu}\bar{W}_{\mu}^{+}\partial_{\nu}W_{\mu}^{-} - \bar{M}^{2}\bar{W}_{\mu}^{+}W_{\mu}^{-} - \frac{1}{2}\partial_{\nu}Z_{\mu}^{0}\partial_{\nu}Z_{\mu}^{0}$ $\frac{1}{2c_{vr}^{2}}M^{2}Z_{\mu}^{0}Z_{\mu}^{0} - \frac{1}{2}\partial_{\mu}A_{\nu}\partial_{\mu}A_{\nu} - \frac{1}{2}\partial_{\mu}H\partial_{\mu}H - \frac{1}{2}m_{h}^{2}H^{2} - \partial_{\mu}\phi^{+}\partial_{\mu}\phi^{-} - M^{2}\phi^{+}\phi^{-} - M^{2}\phi^{-} - M^{2}\phi^{+}\phi^{-} - M^{2}\phi^{+}\phi^{-} - M^{2}\phi^{+}\phi^{-} - M^{2}\phi^{+}\phi^{-} - M^{2}\phi^{-} - M^{2}\phi^{+}\phi^{-} - M^{2}\phi^{-}\phi^{-} - M^{2$ $\frac{1}{2}\partial_{\mu}\phi^{0}\partial_{\mu}\phi^{0} - \frac{1}{2c_{w}^{2}}M\phi^{0}\phi^{0} - \beta_{h}\left[\frac{2M^{2}}{g^{2}} + \frac{2M}{g}H + \frac{1}{2}(H^{2} + \phi^{0}\phi^{0} + 2\phi^{+}\phi^{-})\right] + \frac{2M^{4}}{g^{2}}\alpha_{h} - igc_{w}\left[\partial_{\nu}Z_{\mu}^{0}(W_{\mu}^{+}W_{\nu}^{-} - W_{\nu}^{+}W_{\mu}^{-}) - Z_{\nu}^{0}(W_{\mu}^{+}\partial_{\nu}W_{\mu}^{-} - W_{\mu}^{-}\partial_{\nu}W_{\mu}^{+}) + Z_{\mu}^{0}(W_{\nu}^{+}\partial_{\nu}W_{\mu}^{-} - W_{\nu}^{-}\partial_{\nu}W_{\mu}^{+})\right] - igs_{w}\left[\partial_{\nu}A_{\mu}(W_{\mu}^{+}W_{\nu}^{-} - W_{\nu}^{+}W_{\nu}^{-}) - A_{\nu}(W_{\mu}^{+}\partial_{\nu}W_{\mu}^{-} - W_{\mu}^{-}\partial_{\nu}W_{\mu}^{+}) + A_{\mu}(W_{\nu}^{+}\partial_{\nu}W_{\mu}^{-} - W_{\nu}^{-}\partial_{\nu}W_{\mu}^{+})\right] - \frac{1}{2}g^{2}W_{\mu}^{+}W_{\nu}^{-}W_{\nu}^{+}W_{\nu}^{-} + \frac{1}{2}g^{2}W_{\mu}^{+}W_{\nu}^{-}W_{\mu}^{+}W_{\nu}^{-} + g^{2}c_{w}^{2}(Z_{\mu}^{0}W_{\mu}^{+}Z_{\nu}^{0}W_{\nu}^{-} - Z_{\mu}^{0}Z_{\mu}^{0}W_{\nu}^{+}W_{\nu}^{-}) + g^{2}s_{w}^{2}(A_{\mu}W_{\mu}^{+}A_{\nu}W_{\nu}^{-} - A_{\mu}A_{\mu}W_{\nu}^{+}W_{\nu}^{-}) + g^{2}c_{w}^{2}(Z_{\mu}^{0}W_{\mu}^{+}Z_{\nu}^{0}W_{\nu}^{-} - Z_{\mu}^{0}Z_{\mu}^{0}W_{\nu}^{+}W_{\nu}^{-}) + g^{2}s_{w}^{2}(A_{\mu}W_{\mu}^{+}A_{\nu}W_{\nu}^{-} - A_{\mu}A_{\mu}W_{\nu}^{+}W_{\nu}^{-}) + g^{2}c_{w}^{2}(A_{\mu}W_{\mu}^{+}W_{\nu}^{-}) + g^$ $g^{2}s_{w}c_{w}[A_{\mu}Z_{\nu}^{0}(W_{\mu}^{+}W_{\nu}^{-}-W_{\nu}^{+}W_{\mu}^{-})-2A_{\mu}Z_{\mu}^{0}W_{\nu}^{+}W_{\nu}^{-}]-g\alpha[H^{3}+H\phi^{0}\phi^{0}+2H\phi^{+}\phi^{-}]-\frac{1}{8}g^{2}\alpha_{h}[H^{4}+(\phi^{0})^{4}+4(\phi^{+}\phi^{-})^{2}+4(\phi^{0})^{2}\phi^{+}\phi^{-}+4H^{2}\phi^{-}+4H^{2}\phi^{+}\phi^{-}+4H^{2}\phi^{-}$ $2(\phi^0)^2 H^2]^{-1} g M W_{\mu}^{+} W_{\mu}^{-} H - \frac{1}{2} g \frac{M}{c_w^2} Z_{\mu}^0 H - \frac{1}{2} i g [W_{\mu}^{+} (\phi^0 \partial_{\mu} \phi^- - \phi^- \partial_{\mu} \phi^0) - W_{\mu}^{-} (\phi^0 \partial_{\mu} \phi^+ - \phi^+ \partial_{\mu} \phi^0)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H) - W_{\mu}^{-} (H \partial_{\mu} \phi^+ - \phi^+ \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H) - W_{\mu}^{-} (H \partial_{\mu} \phi^+ - \phi^+ \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H) - W_{\mu}^{-} (H \partial_{\mu} \phi^+ - \phi^+ \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H) - W_{\mu}^{-} (H \partial_{\mu} \phi^+ - \phi^+ \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H) - W_{\mu}^{-} (H \partial_{\mu} \phi^+ - \phi^+ \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H) - W_{\mu}^{-} (H \partial_{\mu} \phi^+ - \phi^+ \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H) - W_{\mu}^{-} (H \partial_{\mu} \phi^+ - \phi^+ \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H) - W_{\mu}^{-} (H \partial_{\mu} \phi^+ - \phi^+ \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H) - W_{\mu}^{-} (H \partial_{\mu} \phi^+ - \phi^+ \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H) - W_{\mu}^{-} (H \partial_{\mu} \phi^+ - \phi^+ \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H) - W_{\mu}^{-} (H \partial_{\mu} \phi^+ - \phi^+ \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H) - W_{\mu}^{-} (H \partial_{\mu} \phi^+ - \phi^+ \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} \phi^- - \phi^- \partial_{\mu} H)] + \frac{1}{2} g [W_{\mu}^{+} (H \partial_{\mu} H)] + \frac{1}{2}$ $\frac{1}{2}g\frac{1}{c_{w}}(Z_{\mu}^{0}(H\partial_{\mu}\phi^{0}-\phi^{0}\partial_{\mu}H)-ig\frac{s_{w}^{2}}{c_{w}}MZ_{\mu}^{0}(W_{\mu}^{+}\phi^{-}-W_{\mu}^{-}\phi^{+})+igs_{w}MA_{\mu}(W_{\mu}^{+}\phi^{-}-W_{\mu}^{-}\phi^{-})+igs_{w}MA_{\mu}(W_{\mu}^{+}\phi^{-}-W_{\mu}^{$ $W_{\mu}^{-}\phi^{+}) - ig \frac{1-2c_{w}^{2}}{2c_{w}} Z_{\mu}^{0}(\phi^{+}\partial_{\mu}\phi^{-} - \phi^{-}\partial_{\mu}\phi^{+}) + igs_{w}A_{\mu}(\phi^{+}\partial_{\mu}\phi^{-} - \phi^{-}\partial_{\mu}\phi^{+}) - \frac{1}{4}g^{2}W_{\mu}^{+}W_{\mu}^{-}[H^{2} + (\phi^{0})^{2} + 2\phi^{+}\phi^{-}] - \frac{1}{4}g^{2}\frac{1}{c_{w}^{2}}Z_{\mu}^{0}Z_{\mu}^{0}[H^{2} + (\phi^{0})^{2} + 2(2s_{w}^{2} - \phi^{-}\partial_{\mu}\phi^{+})] - \frac{1}{4}g^{2}W_{\mu}^{+}W_{\mu}^{-}[H^{2} + (\phi^{0})^{2} + 2\phi^{+}\phi^{-}] - \frac{1}{4}g^{2}\frac{1}{c_{w}^{2}}Z_{\mu}^{0}Z_{\mu}^{0}[H^{2} + (\phi^{0})^{2} + 2(2s_{w}^{2} - \phi^{-}\partial_{\mu}\phi^{+})] - \frac{1}{4}g^{2}W_{\mu}^{+}W_{\mu}^{-}[H^{2} + (\phi^{0})^{2} + 2\phi^{+}\phi^{-}] - \frac{1}{4}g^{2}\frac{1}{c_{w}^{2}}Z_{\mu}^{0}Z_{\mu}^{0}[H^{2} + (\phi^{0})^{2} + 2(2s_{w}^{2} - \phi^{-}\partial_{\mu}\phi^{+})] - \frac{1}{4}g^{2}W_{\mu}^{+}W_{\mu}^{-}[H^{2} + (\phi^{0})^{2} + 2\phi^{+}\phi^{-}] - \frac{1}{4}g^{2}\frac{1}{c_{w}^{2}}Z_{\mu}^{0}Z_{\mu}^{0}[H^{2} + (\phi^{0})^{2} + 2(2s_{w}^{2} - \phi^{-}\partial_{\mu}\phi^{+})] - \frac{1}{4}g^{2}W_{\mu}^{+}W_{\mu}^{-}[H^{2} + (\phi^{0})^{2} + 2\phi^{+}\phi^{-}]] - \frac{1}{4}g^{2}\frac{1}{c_{w}^{2}}Z_{\mu}^{0}[H^{2} + (\phi^{0})^{2} + 2(2s_{w}^{2} - \phi^{-}\partial_{\mu}\phi^{+})]$ $1)^{2}\phi^{+}\phi^{-}] - \tfrac{1}{2}g^{2}\tfrac{s_{w}^{2}}{c_{w}}Z_{\mu}^{0}\phi^{0}(W_{\mu}^{+}\phi^{-} + W_{\mu}^{-}\phi^{+}) - \tfrac{1}{2}ig^{2}\tfrac{s_{w}^{2}}{c_{w}}Z_{\mu}^{0}H(W_{\mu}^{+}\phi^{-} - W_{\mu}^{-}\phi^{+}) + \tfrac{1}{2}g^{2}s_{w}A_{\mu}\phi^{0}(W_{\mu}^{+}\phi^{-} + W_{\mu}^{-}\phi^{+}) + \tfrac{1}{2}ig^{2}s_{w}A_{\mu}H(W_{\mu}^{+}\phi^{-} - W_{\mu}^{-}\phi^{+}) - g^{2}\tfrac{s_{w}}{c_{w}}(2c_{w}^{2} - W_{\mu}^{-}\phi^{+}) + \tfrac{1}{2}ig^{2}s_{w}A_{\mu}H(W_{\mu}^{+}\phi^{-} - W_{\mu}^{-}\phi^{+}) + \tfrac{1}{2}ig^{2}s_{w}A_{\mu}H(W_{\mu}^{+}\phi^{-} - W_{\mu}^{-}\phi^{+}) + \tfrac{1}{2}ig^{2}s_{w}A_{\mu}H(W_{\mu}^{+}\phi^{-} - W_{\mu}^{-}\phi^{+}) - \tfrac{1}{2}ig^{2}s_{w}A_{\mu}H(W_{\mu}^{+}\phi^{-} - W_{\mu}^{-}\phi^{+}) + \tfrac{1}{2}ig^{2}s_{w}A_{\mu}H(W_{\mu}^{+}\phi^{-} - W_{\mu}^{-}\phi^{+}) + \tfrac{1}{2}ig^{2}s_{w}A_{\mu}H(W_{\mu}^{+}\phi^{-} - W_{\mu}^{-}\phi^{+}) + \tfrac{1}{2}ig^{2}s_{w}A_{\mu}H(W_{\mu}^{+}\phi^{-} - W_{\mu}^{-}\phi^{+}) - \tfrac{1}{2}ig^{2}s_{w}A_{\mu}H(W_{\mu}^{+}\phi^{-} - W_{\mu}^{-}\phi^{+}) + \tfrac{1}{2}ig^{2}s_{w}A_{\mu}H(W_{\mu}^{+}\phi^{-} - W_{\mu}^{-}\phi^{-}) + \tfrac{1}{2}ig^{2}s_{w}A_{\mu}H(W_{\mu}^{+}\phi^{-} - W_{\mu}^{-}\phi^{-}) + \tfrac{1}{2}ig^{2}s_{w}A_{\mu}H(W_{\mu}^{+}\phi^{-} - W_{\mu}^{-}\phi^{-}) + \tfrac{1}{2}ig^{2}s_{w}A_{\mu}H(W_{\mu}^{+}$ $1)Z_{\mu}^{0}A_{\mu}\phi^{+}\phi^{-} - g^{1}s_{w}^{2}A_{\mu}A_{\mu}\phi^{+}\phi^{-} - \bar{e}^{\lambda}(\gamma\partial + m_{e}^{\lambda})e^{\lambda} - \bar{\nu}^{\lambda}\gamma\partial\nu^{\lambda} - \bar{u}_{i}^{\lambda}(\gamma\partial + m_{u}^{\lambda})u_{i}^{\lambda} - \bar{u}_{i}$ $\bar{d}_i^{\lambda}(\gamma\partial + m_d^{\lambda})d_i^{\lambda} + igs_wA_{\mu}[-(\bar{e}^{\lambda}\gamma^{\mu}e^{\lambda}) + \frac{2}{3}(\bar{u}_j^{\lambda}\gamma^{\mu}u_j^{\lambda}) - \frac{1}{3}(\bar{d}_j^{\lambda}\gamma^{\mu}d_j^{\lambda})] + \frac{ig}{4c_w}Z_{\mu}^0[(\bar{\nu}^{\lambda}\gamma^{\mu}(1+\bar{\nu}^{\lambda}\gamma^{\mu}u_j^{\lambda}) - \frac{1}{3}(\bar{u}_j^{\lambda}\gamma^{\mu}u_j^{\lambda})] + \frac{ig}{4c_w}Z_{\mu}^0[(\bar{\nu}^{\lambda}\gamma^{\mu}u_j^{\lambda}) - \frac{ig}{4c_w}Z_{\mu}^0]$ $(\gamma^{5})\nu^{\lambda}) + (\bar{e}^{\lambda}\gamma^{\mu}(4s_{w}^{2} - 1 - \gamma^{5})e^{\lambda}) + (\bar{u}_{j}^{\lambda}\gamma^{\mu}(\frac{4}{3}s_{w}^{2} - 1 - \gamma^{5})u_{j}^{\lambda}) + (\bar{d}_{j}^{\lambda}\gamma^{\mu}(1 - \frac{8}{3}s_{w}^{2} - 1 - \gamma^{5})u_{j}^{\lambda}) + (\bar{e}^{\lambda}\gamma^{\mu}(4s_{w}^{2} - 1 - \gamma^{5})e^{\lambda}) + (\bar{u}_{j}^{\lambda}\gamma^{\mu}(\frac{4}{3}s_{w}^{2} - 1 - \gamma^{5})u_{j}^{\lambda}) + (\bar{e}^{\lambda}\gamma^{\mu}(4s_{w}^{2} - 1 - \gamma^{5})e^{\lambda}) + (\bar{u}_{j}^{\lambda}\gamma^{\mu}(1 - \frac{8}{3}s_{w}^{2} - 1 - \gamma^{5})u_{j}^{\lambda}) + (\bar{e}^{\lambda}\gamma^{\mu}(4s_{w}^{2} - 1 - \gamma^{5})e^{\lambda}) + (\bar{u}_{j}^{\lambda}\gamma^{\mu}(\frac{4}{3}s_{w}^{2} - 1 - \gamma^{5})u_{j}^{\lambda}) + (\bar{e}^{\lambda}\gamma^{\mu}(1 - \frac{8}{3}s_{w}^{2} - 1 - \gamma^{5})e^{\lambda}) + (\bar{e}^{\lambda}\gamma^{\mu}(1 - \frac{8}{3}s_{w}^{2} - 1 - \gamma^{5})u_{j}^{\lambda}) + (\bar{e}^$ $\gamma^{5})d_{j}^{\lambda})] + \frac{ig}{2\sqrt{2}}W_{\mu}^{+}[(\bar{\nu}^{\lambda}\gamma^{\mu}(1+\gamma^{5})e^{\lambda}) + (\bar{u}_{j}^{\lambda}\gamma^{\mu}(1+\gamma^{5})C_{\lambda\kappa}d_{j}^{\kappa})] + \frac{ig}{2\sqrt{2}}W_{\mu}^{-}[(\bar{e}^{\lambda}\gamma^{\mu}(1+\gamma^{5})e^{\lambda}) + (\bar{u}_{j}^{\lambda}\gamma^{\mu}(1+\gamma^{5})e^{\lambda})] + \frac{ig}{2\sqrt{2}}W_{\mu}^{-}[(\bar{e}^{\lambda}\gamma^{\mu}(1+\gamma^{5})e^{\lambda})] + \frac{ig}{2\sqrt{2}}W_{\mu}^{-}[(\bar{e}^{\lambda}\gamma^{\mu}(1$ $\gamma^{5})\nu^{\lambda}) + (\bar{d}_{j}^{\kappa}C_{\lambda\kappa}^{\dagger}\gamma^{\mu}(1+\gamma^{5})u_{j}^{\lambda})] + \frac{ig}{2\sqrt{2}}\frac{m_{e}^{\lambda}}{M}[-\phi^{+}(\bar{\nu}^{\lambda}(1-\gamma^{5})e^{\lambda}) + \phi^{-}(\bar{e}^{\lambda}(1+\gamma^{5})e^{\lambda})] + (\bar{d}_{j}^{\kappa}C_{\lambda\kappa}^{\dagger}\gamma^{\mu}(1+\gamma^{5})u_{j}^{\lambda})] + \frac{ig}{2\sqrt{2}}\frac{m_{e}^{\lambda}}{M}[-\phi^{+}(\bar{\nu}^{\lambda}(1-\gamma^{5})e^{\lambda}) + \phi^{-}(\bar{e}^{\lambda}(1+\gamma^{5})u_{j}^{\lambda})] + (\bar{d}_{j}^{\kappa}C_{\lambda\kappa}^{\dagger}\gamma^{\mu}(1+\gamma^{5})u_{j}^{\lambda})] + \frac{ig}{2\sqrt{2}}\frac{m_{e}^{\lambda}}{M}[-\phi^{+}(\bar{\nu}^{\lambda}(1-\gamma^{5})e^{\lambda}) + \phi^{-}(\bar{e}^{\lambda}(1+\gamma^{5})u_{j}^{\lambda})] + (\bar{d}_{j}^{\kappa}C_{\lambda\kappa}^{\dagger}\gamma^{\mu}(1+\gamma^{5})u_{j}^{\lambda})] + (\bar{d}_{j}^{\kappa}C_{\lambda\kappa}^{\dagger}\gamma^{\mu}(1+\gamma^{5})u_{j}^{\lambda})$ $\gamma^5)\nu^\lambda)] - \tfrac{g}{2} \tfrac{m_e^\lambda}{M} [H(\bar{e}^\lambda e^\lambda) + i\phi^0(\bar{e}^\lambda\gamma^5 e^\lambda)] + \tfrac{ig}{2M\sqrt{2}} \phi^+ [-m_d^\kappa (\bar{u}_j^\lambda C_{\lambda\kappa} (1-\gamma^5) d_j^\kappa) +$ $m_u^{\lambda}(\bar{u}_j^{\lambda}C_{\lambda\kappa}(1+\gamma^5)d_j^{\kappa}] + \frac{ig}{2M\sqrt{2}}\phi^-[m_d^{\lambda}(\bar{d}_j^{\lambda}C_{\lambda\kappa}^{\dagger}(1+\gamma^5)u_j^{\kappa}) - m_u^{\kappa}(\bar{d}_j^{\lambda}C_{\lambda\kappa}^{\dagger}(1-\gamma^5)u_i^{\kappa}] - m_u^{\kappa}(\bar{d}_j^{\lambda}C_{\lambda\kappa}^{\dagger}(1-\gamma^5)u_i^{\kappa}) - m_u^{\kappa}$ $\begin{array}{l} \frac{g}{2} \frac{m_u^{\lambda}}{M} H(\bar{u}_j^{\lambda} u_j^{\lambda}) - \frac{g}{2} \frac{m_d^{\lambda}}{M} H(\bar{d}_j^{\lambda} d_j^{\lambda}) + \frac{ig}{2} \frac{m_u^{\lambda}}{M} \phi^0(\bar{u}_j^{\lambda} \gamma^5 u_j^{\lambda}) - \frac{ig}{2} \frac{m_d^{\lambda}}{M} \phi^0(\bar{d}_j^{\lambda} \gamma^5 d_j^{\lambda}) + \bar{X}^+(\partial^2 - M^2) X^- + \bar{X}^0(\partial^2 - \frac{M^2}{c_w^2}) X^0 + \bar{Y} \partial^2 Y + ig c_w W_\mu^+(\partial_\mu \bar{X}^0 X^- - M^2) X^- + \bar{X}^0(\partial^2 - \frac{M^2}{c_w^2}) X^0 + \bar{Y} \partial^2 Y + ig c_w W_\mu^+(\partial_\mu \bar{X}^0 X^- - M^2) X^- + \bar{X}^0(\partial^2 - \frac{M^2}{c_w^2}) X^0 + \bar{Y} \partial^2 Y + ig c_w W_\mu^+(\partial_\mu \bar{X}^0 X^- - M^2) X^0 + \bar{Y} \partial^2 Y + ig c_w W_\mu^+(\partial_\mu \bar{X}^0 X^- - M^2) X^0 + \bar{Y} \partial^2 Y + ig c_w W_\mu^+(\partial_\mu \bar{X}^0 X^- - M^2) X^0 + \bar{Y} \partial^2 Y + ig c_w W_\mu^+(\partial_\mu \bar{X}^0 X^- - M^2) X^0 + \bar{Y} \partial^2 Y + ig c_w W_\mu^+(\partial_\mu \bar{X}^0 X^- - M^2) X^0 + \bar{Y} \partial^2 Y + ig c_w W_\mu^+(\partial_\mu \bar{X}^0 X^- - M^2) X^0 + ig c_w W_\mu^$ $\partial_{\mu}\bar{X}^{+}X^{0}) + igs_{w}W_{\mu}^{+}(\partial_{\mu}\bar{Y}X^{-} - \partial_{\mu}\bar{X}^{+}Y^{-}) + igc_{w}W_{\mu}^{-}(\partial_{\mu}\bar{X}^{-}X^{0} - \partial_{\mu}\bar{X}^{0}X^{+}) + igc_{w}W_{\mu}^{-}(\partial_{\mu}\bar{X}^{-}X^{0} - \partial_{\mu}\bar{X}^{0}X^{-}) + igc_{w}W_{\mu}^{-}(\partial_{\mu}\bar{X}^{0}X^{0} - \partial_{\mu}\bar{X}^{0}X^{0}) + igc_{w}W_{\mu}^{-}(\partial_{\mu}\bar{X}^{0}X^{0} - \partial_{\mu}\bar{X$ $igs_{w}W_{\mu}^{-}(\partial_{\mu}\bar{X}^{-}Y-\partial_{\mu}\bar{Y}X^{+})+igc_{w}Z_{\mu}^{0}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})-\frac{1}{2}gM[\bar{X}^{+}X^{+}H+\bar{X}^{-}X^{-}H+\frac{1}{c_{w}^{2}}\bar{X}^{0}X^{0}H]+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})-\frac{1}{2}gM[\bar{X}^{+}X^{+}H+\bar{X}^{-}X^{-}H+\frac{1}{c_{w}^{2}}\bar{X}^{0}X^{0}H]+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})-\frac{1}{2}gM[\bar{X}^{+}X^{+}H+\bar{X}^{-}X^{-}H+\frac{1}{c_{w}^{2}}\bar{X}^{0}X^{0}H]+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{+}-\partial_{\mu}\bar{X}^{-}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{-})+igs_{w}A_{\mu}(\partial_{\mu}\bar{X}^{+}X^{ \tfrac{1-2c_w^2}{2c_w}igM[\bar{X}^+X^0\phi^+ - \bar{X}^-X^0\phi^-] + \tfrac{1}{2c_w}igM[\bar{X}^0X^-\phi^+ - \bar{X}^0X^+\phi^-] + \tfrac{1}{2c_w}igM[\bar{X}^0X^-\phi^+ - \bar{X}^0X^-\phi^-] + \tfrac{1}{2c_w}igM[\bar{X}^0X^-\phi^+ - \bar{X}^0X^-\phi^-] + \tfrac{1}{2c_w}igM[\bar{X}^0X^-\phi^+ - \bar{X}^0X^-\phi^-] + \tfrac{1}{2c_w}igM[\bar{X}^0X^-\phi^-] + \tfrac{1}{2c_w}ig$ $igMs_w[\bar{X}^0X^-\phi^+ - \bar{X}^0X^+\phi^-] + \frac{1}{2}igM[\bar{X}^+X^+\phi^0 - \bar{X}^-X^-\phi^0]$