

Feynman rules for gauge-ghost

$$= (i)ie(-ip)^\mu = iep^\mu$$

$$= -iep^\mu$$

$$= ig \cos \theta_w p^\mu$$

$$= -ig \cos \theta_w p^\mu$$

$$= iep^\mu$$

$$= ig \cos \theta_w p^\mu$$

$$= -iep^\mu$$

$$= -ig \cos \theta_w p^\mu$$

$$= -iep^\mu$$

$$= -ig \cos \theta_w p^\mu$$

$$= iep^\mu$$

$$= ig \cos \theta_w p^\mu$$

Scalar-ghost

$$g_z^2 = g^2 + g'^2$$

$$H^0 \begin{array}{l} \swarrow \eta^- \\ \searrow \eta^+ \end{array} = \frac{-i}{4} \xi g^2 v$$

C.C.

$$H^0 \begin{array}{l} \swarrow \eta^+ \\ \searrow \bar{\eta}^- \end{array} = \frac{-i}{4} \xi g^2 v$$

$$H^0 \begin{array}{l} \swarrow \eta_z \\ \searrow \bar{\eta}_z \end{array} = \frac{-i}{4} \xi g_z^2 v$$

$$\phi^0 \begin{array}{l} \swarrow \eta \\ \searrow \bar{\eta}^+ \end{array} = \frac{-i}{4} \xi g^2 v$$

$$\phi^0 \begin{array}{l} \swarrow \eta^+ \\ \searrow \bar{\eta}^- \end{array} = \frac{+i}{4} \xi g^2 v$$

$$\phi^- \begin{array}{l} \swarrow \eta^+ \\ \searrow \bar{\eta}_z \end{array} = \frac{i}{4} \xi g g_z v$$

$$\phi^+ \begin{array}{l} \swarrow \eta_z \\ \searrow \bar{\eta}^+ \end{array} = \frac{-i}{4} \xi g g_z (\cos 2\theta_w) v$$

$$\phi^+ \begin{array}{l} \swarrow \eta^- \\ \searrow \bar{\eta}_z \end{array} = \frac{i}{4} \xi g g_z v$$

$$\phi^+ \begin{array}{l} \swarrow \eta_z \\ \searrow \bar{\eta}^- \end{array} = \frac{-i}{4} \xi g g_z (\cos 2\theta_w) v$$

$$\phi^- \begin{array}{l} \swarrow \eta_A \\ \searrow \bar{\eta}^+ \end{array} = \frac{-i}{2} \xi g v$$

$$\phi^+ \begin{array}{l} \swarrow \eta_A \\ \searrow \bar{\eta}^- \end{array} = \frac{-i}{2} \xi g v$$