

Fields $\underline{27}_{1-3} \ni \Psi_i, \Phi_i, S_{1,2,3}$
 $(16, 1) (10, -2) (1, +4)$

$$X(-4), Y(4), Z(0)$$

$$W = M S X + \lambda Z (X Y - v^2) \left(+ \kappa_i N_i S_i X \right)_{i=1,2}$$

$$= X(MS + \lambda YZ) - \lambda Z v^2$$

$$\begin{array}{c} S_3 \\ 2-a \quad 2 \quad a-a \\ \text{R-charge} \end{array}$$

$$+ \cancel{\beta} X \beta X Y$$

$$+ \cancel{\alpha} Z \alpha S X Z$$

→ We can't have

$$W \Phi = -\frac{g}{2} Y \Phi \Phi - \frac{k}{2} S \Phi \bar{\Phi}$$

With R-sym, $\begin{cases} X=0, \lambda XZ=0 \\ MS + \lambda YZ = 0 \\ XY - v^2 = 0 \end{cases}$

S

$$\text{VEV } \langle X \rangle, \langle Y \rangle, \langle F_S \rangle, \langle F_Z \rangle$$

$$\Rightarrow X = Z = 0$$

$$Y = \frac{v^2}{X} \rightarrow \infty$$

d-term limited

$$S = 0$$

$$V = \left| \frac{\partial W}{\partial \phi_i} \right|^2 + \underbrace{16g^2}_{\text{Z}} \left(|Y|^2 + |S|^2 - |X|^2 \right)^2$$

$$\begin{array}{c} \uparrow \\ 4 \end{array} |MX|^2 + |\lambda(XY - v^2)|^2 + |MS + \lambda YZ|^2 + |\lambda XZ|^2$$