2/26/08 Lecture outline

• More on

$$\mathcal{L}_{susy} = \int d^4\theta K(\Phi^i, \bar{\Phi}^i) + \int d^2\theta W(\Phi_i) + h.c..$$

• Discuss non-linear sigma models and the susy case, with general $K(\Phi^i, \overline{\Phi}^i)$. Target space has Kähler geometry.

• Supersymmetric vacua for various examples: $K = X\bar{X}$ and $W = \frac{1}{2}mX^2$; $K = X\bar{X}$ and W = fX; $K = X\bar{X}$ and $W = fX + \frac{1}{2}mX^2$; $K = X\bar{X}$ and $W = \frac{1}{2}mX^3 + \frac{g}{6}X^3$; $K = L\bar{L} + H\bar{H}$ and $W = gLH^2$.