

3/6/08 Lecture outline

- Supersymmetric gauge theories. Gauge multiplet  $V$ . Super gauge invariance. Including charged matter multiplets.

$$\mathcal{L}_{gauge} = \int d^2\theta \frac{-i\tau}{16\pi} W_\alpha W^\alpha + h.c.,$$

$$\mathcal{L}_{matter} = \int d^4\theta \sum_i \bar{\Phi}_i e^{q_i V} \Phi_i + \int d^2\theta W(\Phi_i) + h.c..$$

Expand out in components.