

$SU(2) \times SU(2)$

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$SO(4) \times U(N)$

$U(1)^2 \quad U(1)^N$

$\mathbb{R}_{\varepsilon_1}^2 \times \mathbb{R}_{\varepsilon_2}^2 \quad \underline{\underline{(a_1, \dots, a_N)}}$

$\Omega$ -background

$$\int e^{-\varepsilon_1 |z_1|^2 - \varepsilon_2 |z_2|^2} dz_1 dz_2 d\bar{z}_1 d\bar{z}_2 d^4\theta = \frac{1}{\varepsilon_1 \varepsilon_2}$$

$$\int e^{-\varepsilon_1 |z_1|^2 - \varepsilon_2 |z_2|^2} dz_1 d\bar{z}_1 d^2\theta = ( \quad )$$

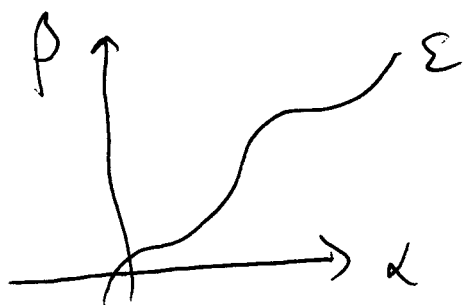
$$\log Z = \frac{1}{\varepsilon_1 \varepsilon_2} F(a) + \dots$$

$$z = \frac{i}{g^2} + \theta$$

$$Z(\varepsilon_1, \varepsilon_2) = \sum_{M_n} g^n ( \quad )$$

$\varphi(x)$

$$\varphi(x) \left( \frac{\partial}{\partial x} \right) \varphi(y) + \int e^{\varphi} Q(x)$$



$$(E, x) \rightarrow (\alpha, \beta)$$

$$E dx - \beta d\alpha = dW(x, \alpha)$$

