

$$\mathrm{IIB}$$

$$D_{-1} \text{ brane=instanton}$$

$$i\in 0|9$$

$$1\leqslant \alpha \leqslant 16$$

$$X^i\in \mathbb{C}_N^{\mathfrak{U}}\ni \psi^\alpha$$

$$\mathrm{discrete\;action}$$

$$S\left(X^i;\;\psi^\alpha\right)=\sum_{i<j}\mathrm{tr}\;X^i\stackrel{2}{\times}X^j+\sum_{\alpha\beta i}\mathrm{Tr}\;\Gamma_{\alpha\beta}^i\psi^\alpha X^i\times\psi^\beta$$