

Obers

T duality $\mathbb{R}_{k:k}^{\cup}$

$$\varrho = \log g_s \mid \log R_1 \mid \dots \mid \log R_k \in \mathbb{R}^{1:k}$$

$$x = x^0 \mid x^1 \mid \dots \mid x^k \in \mathbb{R}^{1:k} \text{ BPS state}$$

$\mathbb{Z}^{1:k}$ charge lattice

$$\varrho^x = g_s^{x_0} R_1^{x_1} \dots R_k^{x_k} \text{ tension}$$

R_1	0	0	0	0	1	0	0	0	0
0	\dots	0	0		ϑ_2^1	1	0	0	0
0	0	R_{d-}	0		ϑ_i^1	ϑ_i^j	1	0	0
0	0	0	R_d		ϑ_i^1	ϑ_i^j	ϑ^{d-}	1	0
0					E_μ^ν	\mathcal{X}_μ^1	\mathcal{X}_μ^j	\mathcal{X}_μ^{d-1}	\mathcal{X}_μ^d