

$$D_p = x^0 | x^p$$

$$\text{boundary cond}$$

$$x^{p+} = \ldots = x^9 = 0$$

$$\text{vector}$$

$$0 \leqslant i\!:\!j \leqslant p$$

$$A_j\left(x^i\right)$$

$$\text{scalar}$$

$$0\leqslant i\leqslant p<j$$

$$X^j\left(x^i\right)$$

$$\text{oscillations of Dp brane}$$

$$\text{spinor}$$

$$\psi^{\alpha}$$