Smith

II D branes

$$d = 10$$

$$4\pi \varkappa^2 = (2\pi \ell_s)^8$$

$$p + q = 8$$

$$\text{RR field strength dual coupling } \not{p} \sim \begin{cases} D_p^- \\ D_q^- \end{cases}$$

$$(2\pi \ell_s)^p \mathcal{D}_p^- \, (2\pi \ell_s)^q \mathcal{D}_q^- = n \in \mathbb{Z}$$

$$\text{open strings end} \implies \text{eff action=p-dim gauge theory}$$

$$(2\pi \ell_s)^p \mathcal{D}_p^- = \frac{1}{g_s}$$