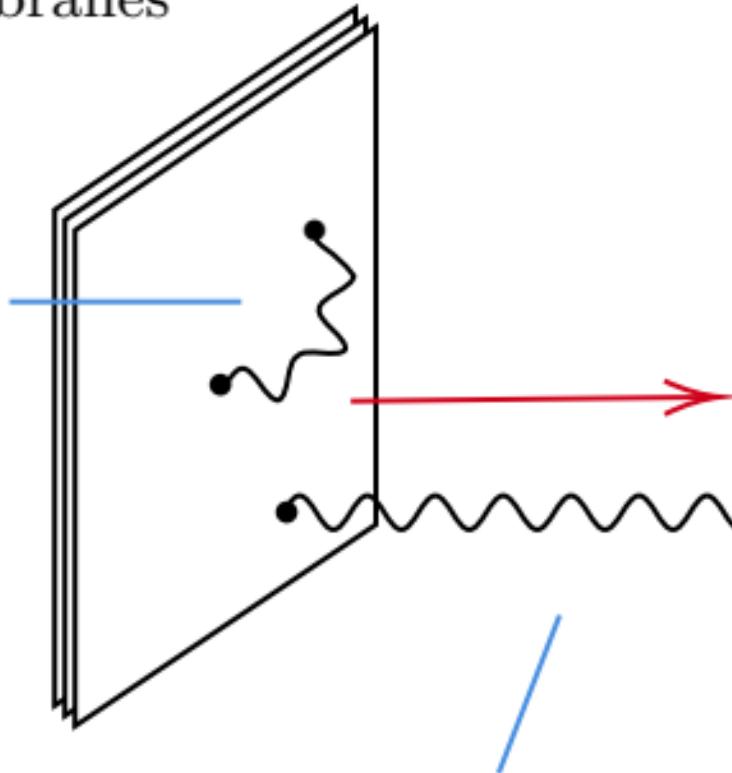


Coincident

D-branes

U(3) gauge
vector



Separated

D-brane

U(1) gauge
vector

U(4)
 $\rightarrow U(3) \times U(1)$
higgsing

massive W-boson