

# BLACK HOLE

## 5. D-brane (5 )



1. \_\_\_\_\_
2. \_\_\_\_\_  
( )
3. \_\_\_\_\_  
( )
- 3.1 \_\_\_\_\_
- 3.2 [Schwarzschild solution](#)
- 3.3 [Extremal Reissner-Nordström solution](#)
4. \_\_\_\_\_  
( )
5. [D-brane](#)  
( )

Ising Model

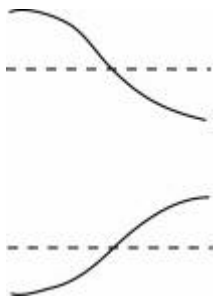
dual  
===

closed string

$$R \rightarrow R' = \frac{\alpha'}{R}$$

====  
correspondence

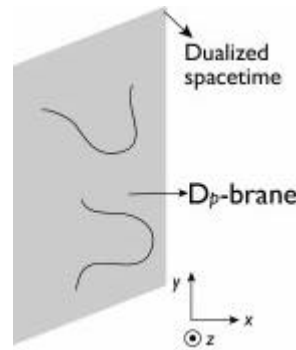
open string



$$(\partial_\sigma X^\mu = 0)$$

$$\mu = 0, \dots, p$$

=====  
 $\hat{\mu} = p + 1, \dots, 9$   
 $(X^{\hat{\mu}} = 0)$



Free boundary conditions  
 $(\partial_\sigma X^\mu = 0)$   
Newmann B.C.

Fixed boundary conditions  
 $(X^\mu = 0)$   
Dirichlet B.C.







# Black Hole



인제대학교 컴퓨터응용과학부 블랙홀 연구실  
<http://myung.inje.ac.kr/blackhole>