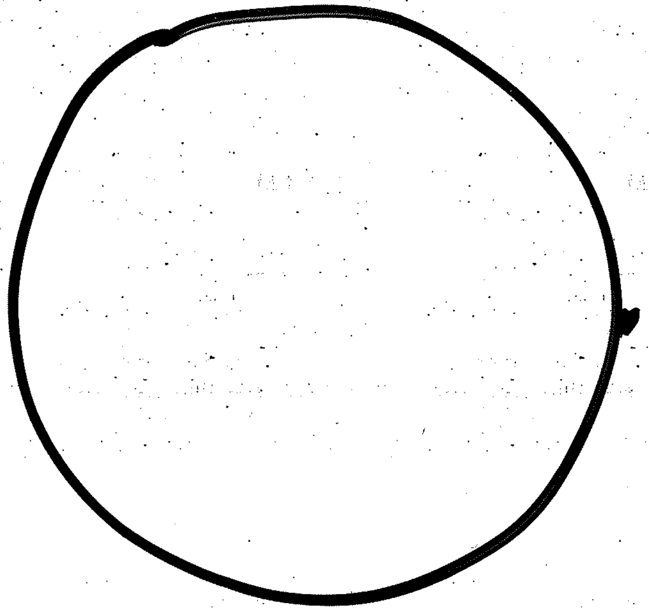
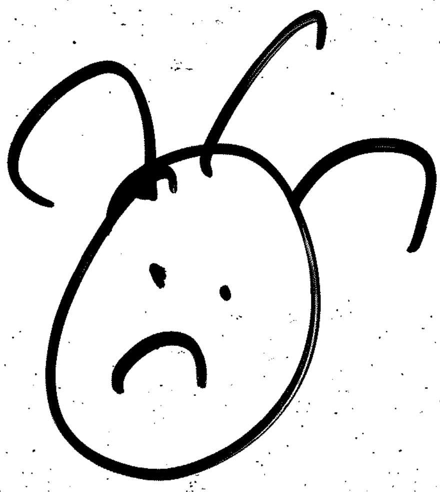
$r_g = 2G_N M$

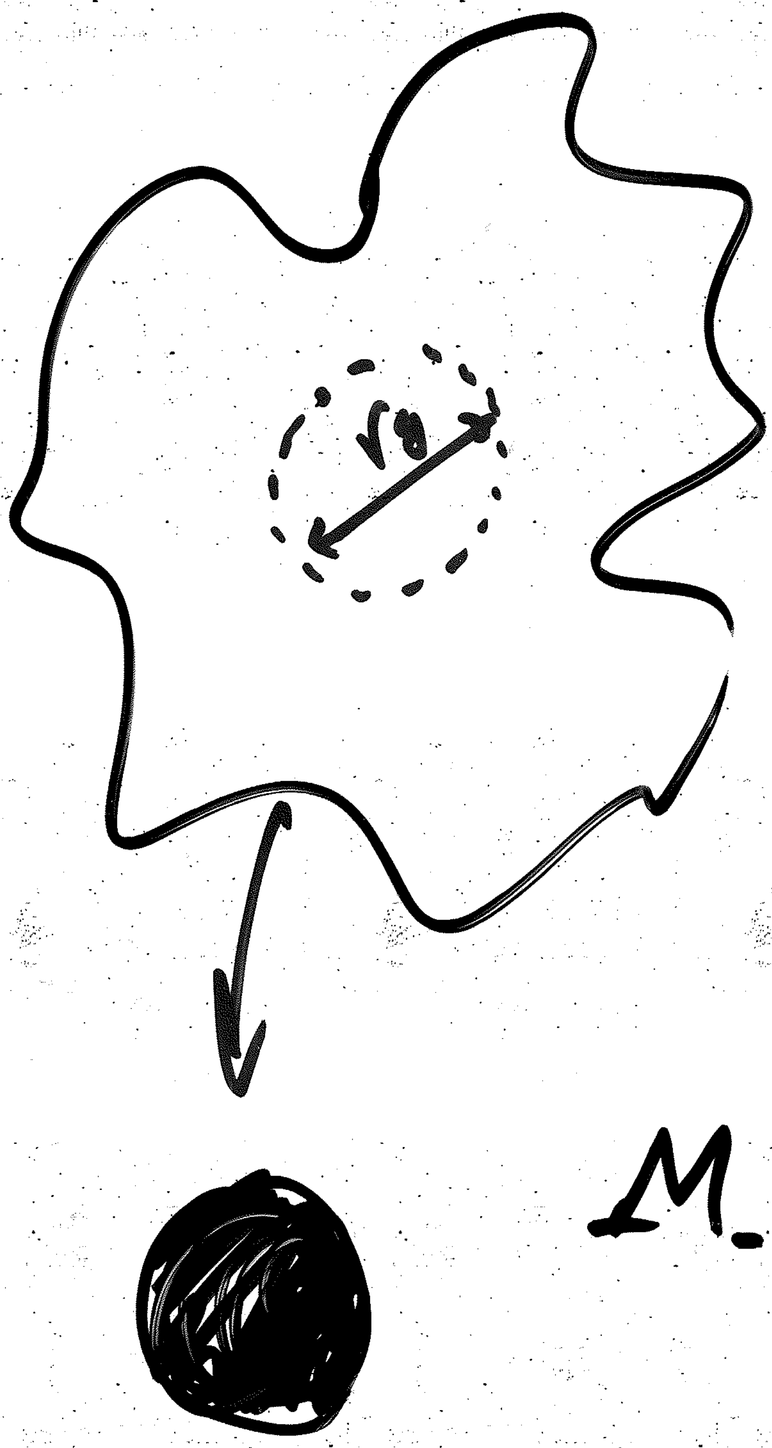




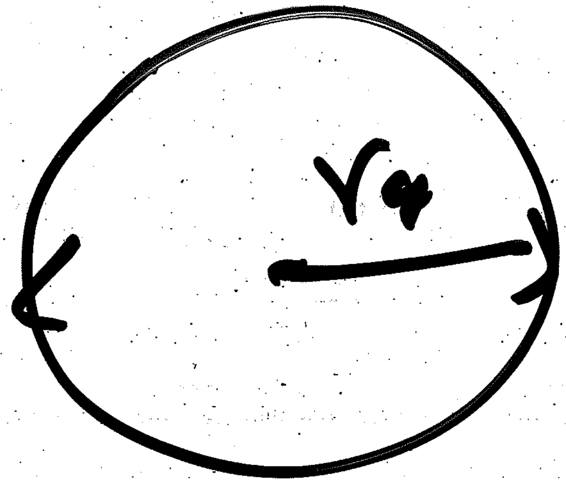
M, J, Q

M

$$r_g \equiv 2 G_N M$$



M



$$T = \frac{1}{r_g}$$

$$L_p$$

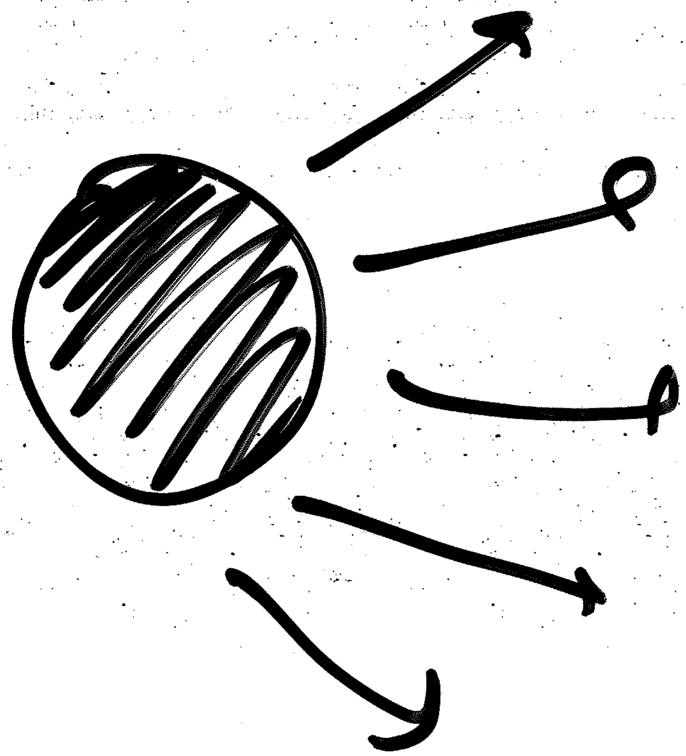
$$L_*$$

$$r_g = L_p = \frac{M_{BH}}{M_p^2}$$

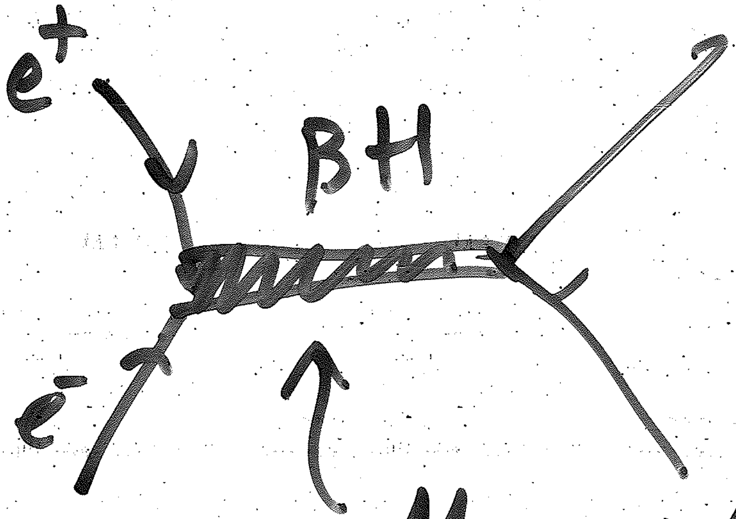
$$M_{BH} \sim M_p$$

$$T \sim M_p, \quad \Gamma \sim \Pi_p$$

$e^+ + e^- \to BH$



$m < T$

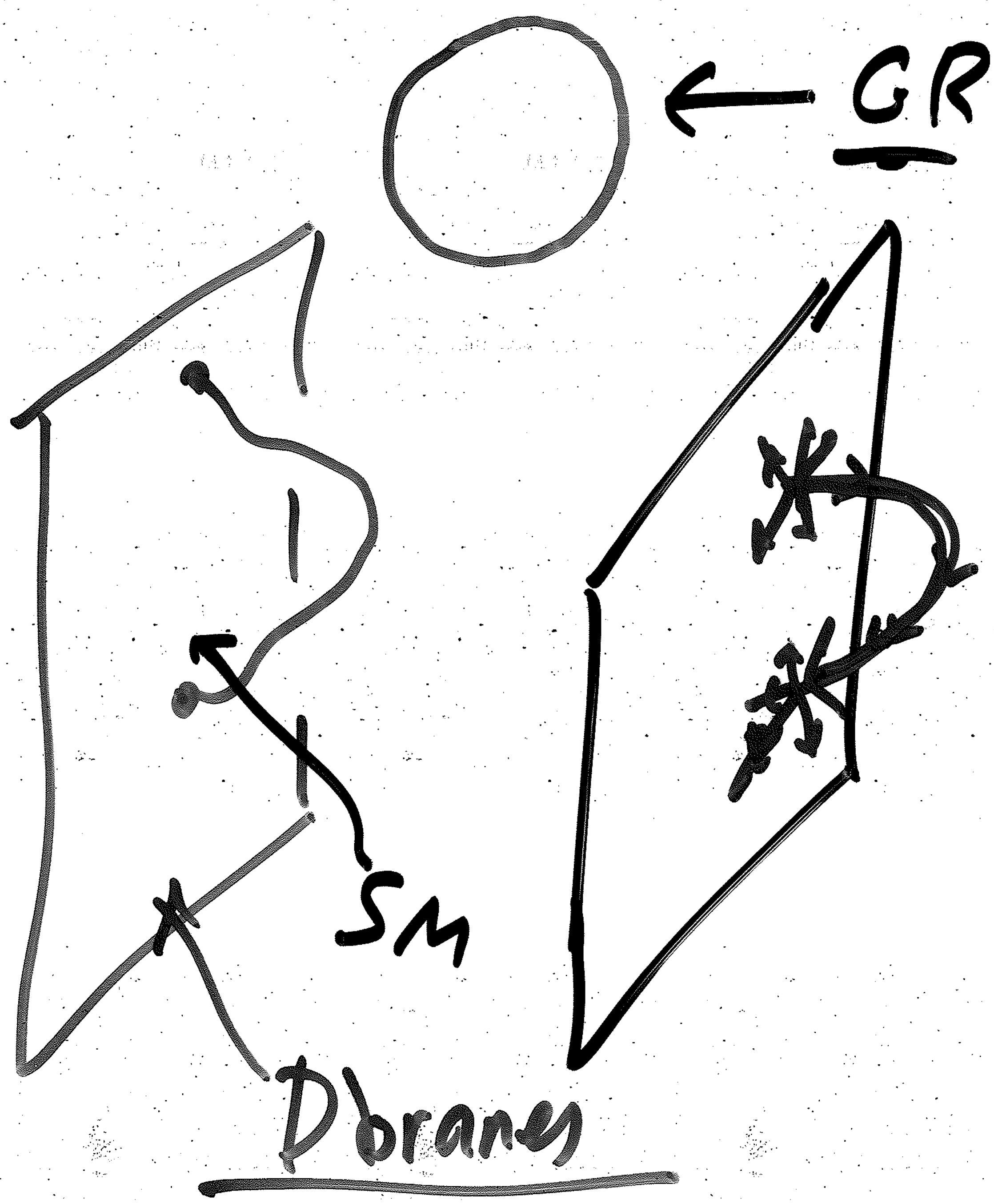


$$M_{BH} \sim M_* = \frac{1}{L_*}$$

$$r_g = L_*$$

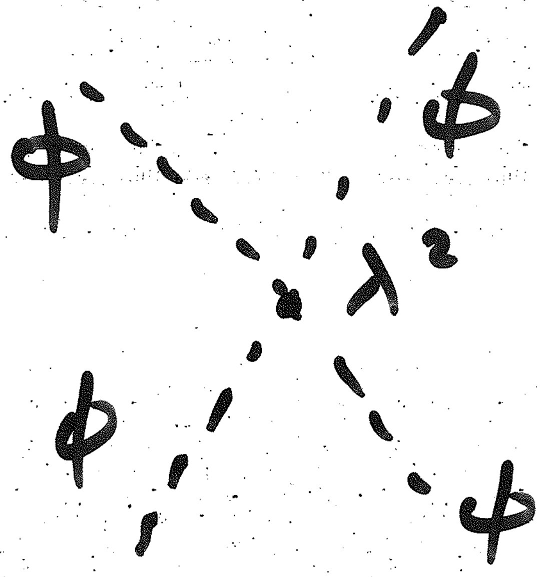
$$T \sim M_*$$

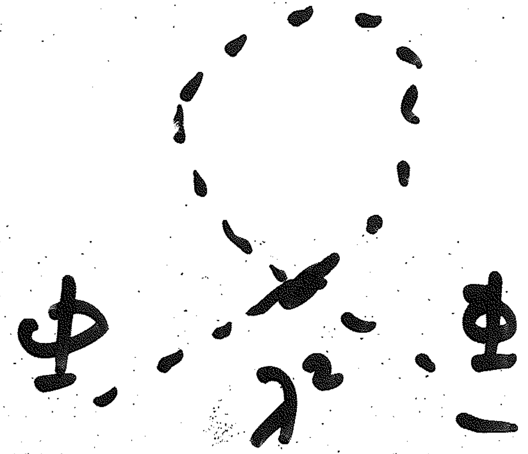
$$\Gamma \sim M_*$$


GR
SM
D branes

⊛ SUSY

$$\lambda^2 |\Phi|^4$$





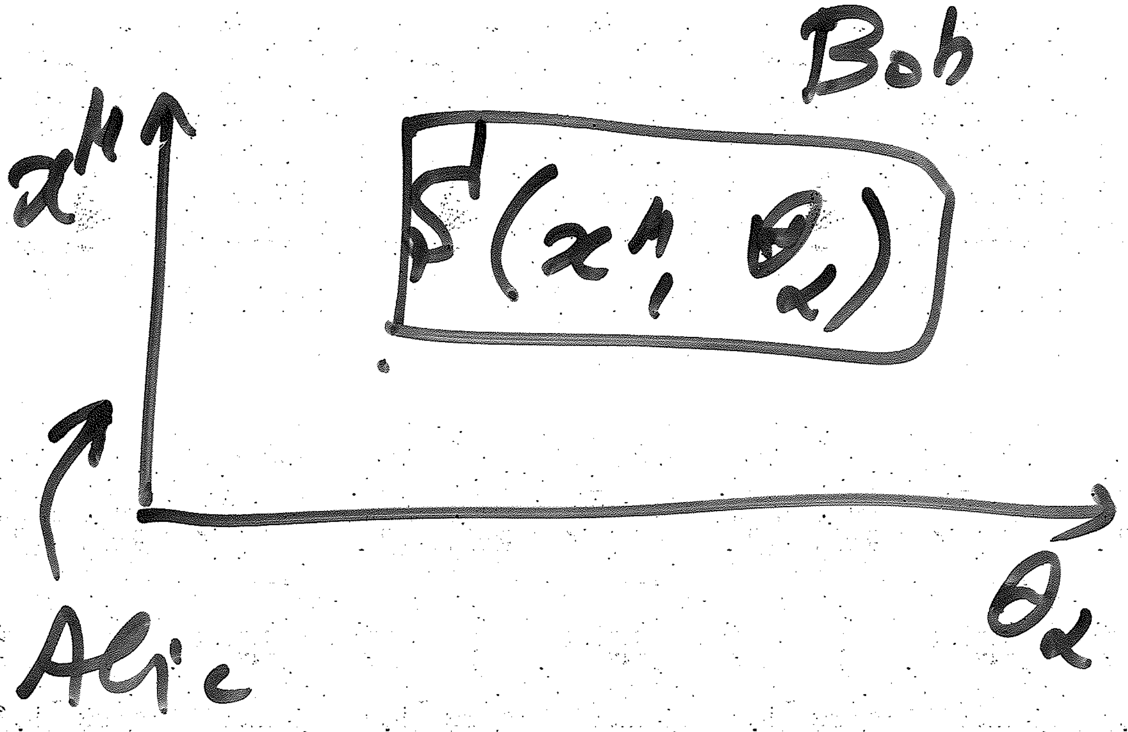
$$\longrightarrow m_\phi^2 \propto \lambda^2 \Lambda^2$$

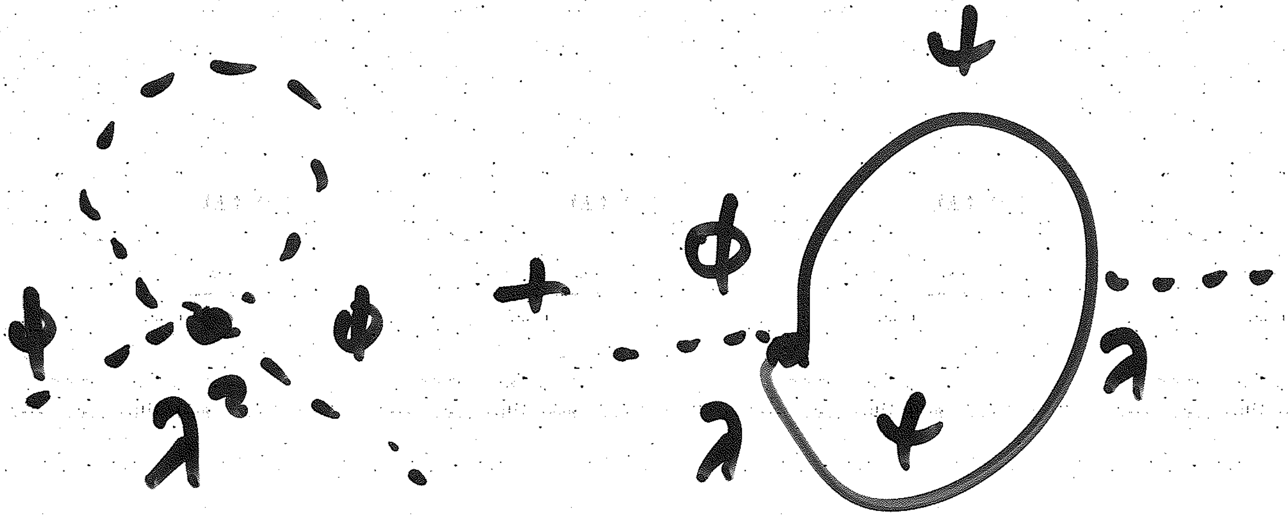
$$+ \lambda \Phi \psi \psi$$

$$x_\mu \to x_\mu + a_\mu$$

$$\theta_\alpha \to \theta_\alpha + \xi_\alpha$$

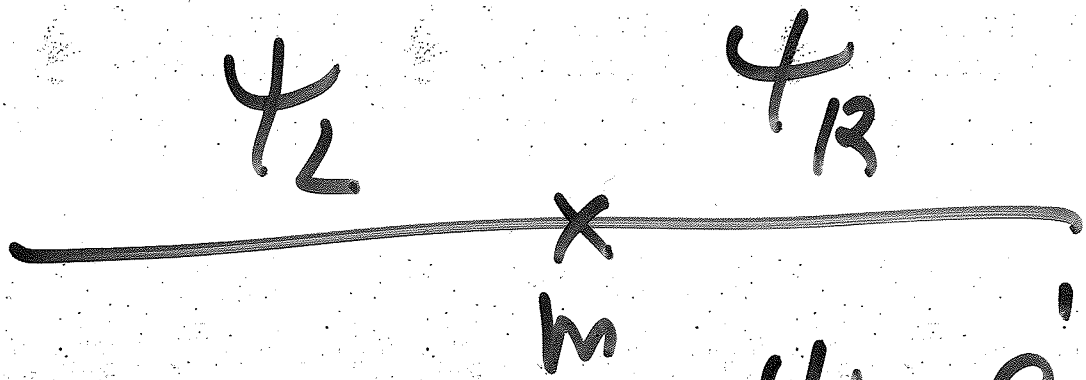
$$x_\mu, \; x_5$$





$$= 0.$$

$$\phi \longleftrightarrow \psi$$



$$m \to 0$$

$$\psi_L \to e^{i\alpha}\psi_L$$

$$\psi_R \to e^{i\beta}\psi_R$$