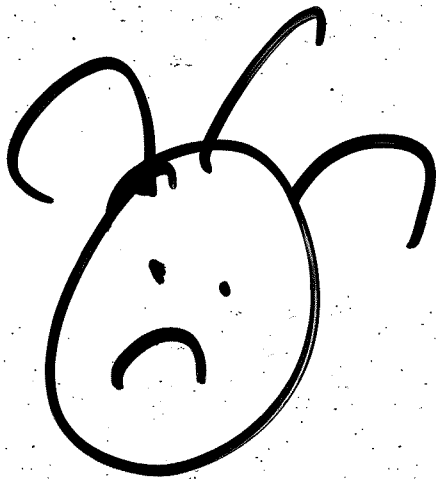
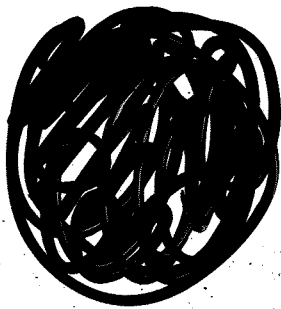


$$\underline{r_g = 2GM}$$

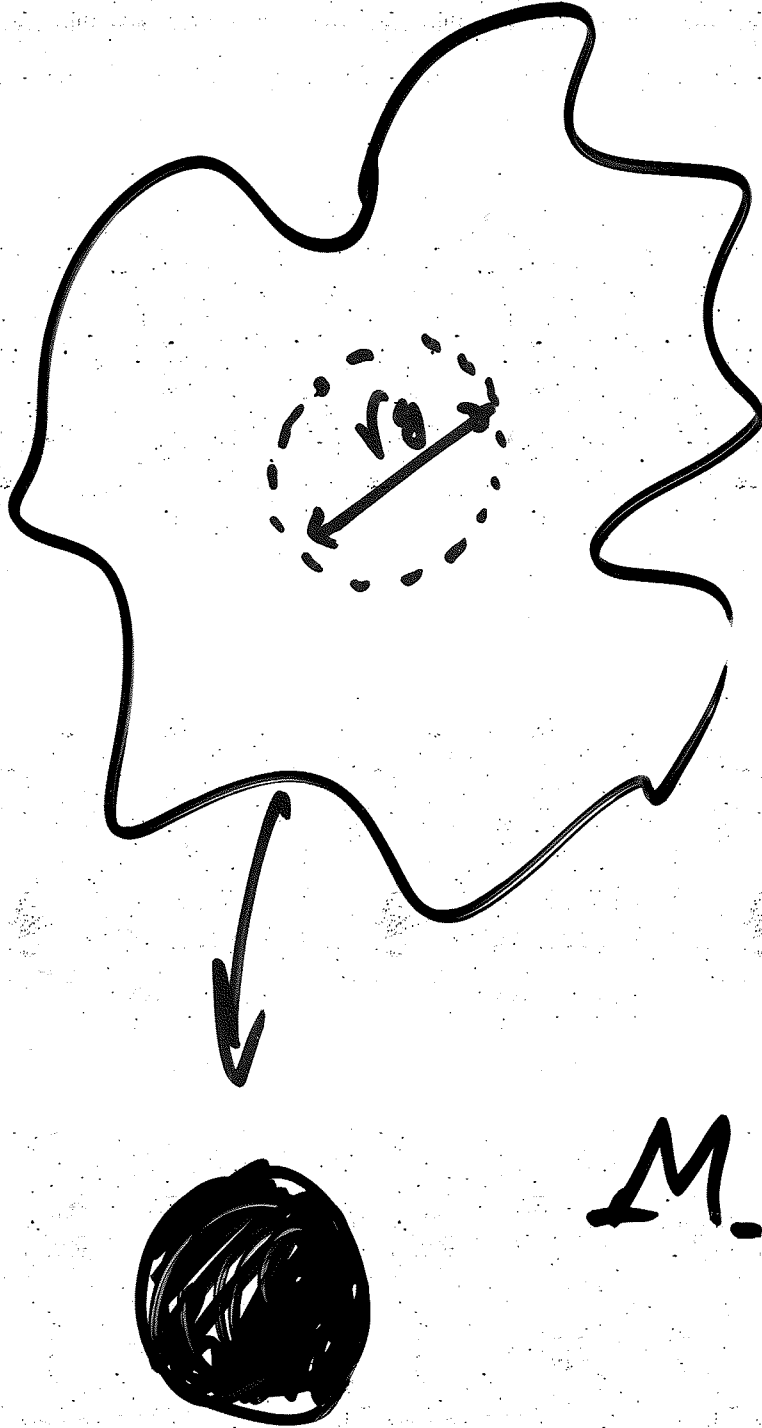


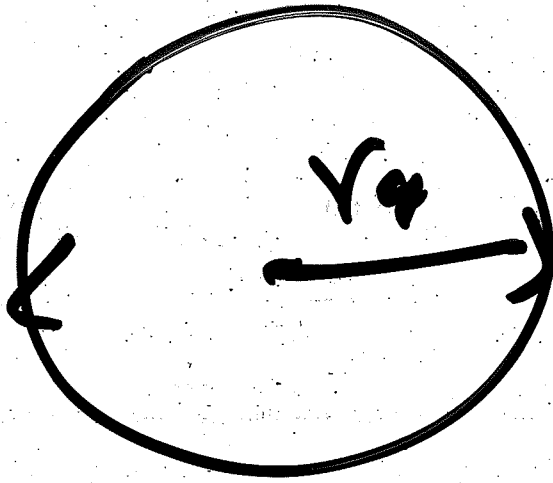
M, J, Q



M

$$v_g \equiv 2GM$$





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

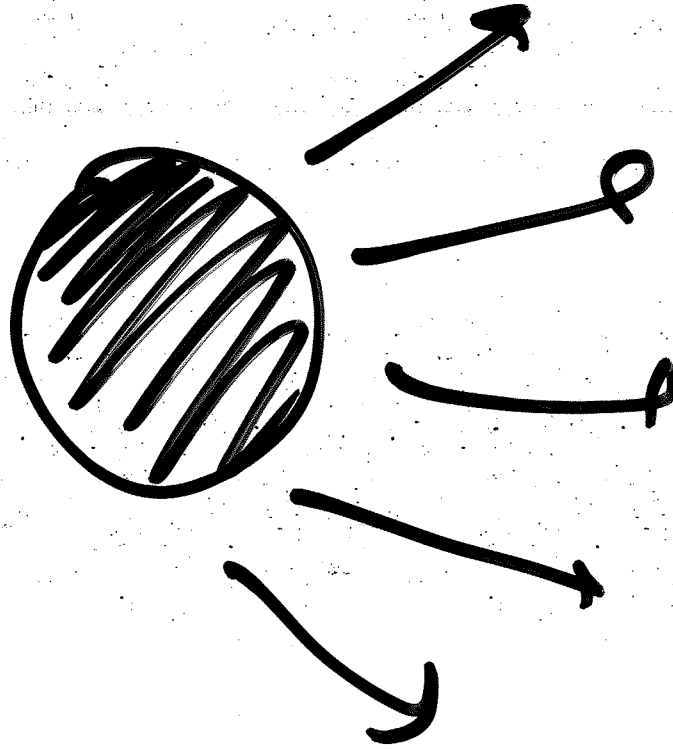


$$v_g = L_p = \frac{M_{BH}}{M_p^2}$$

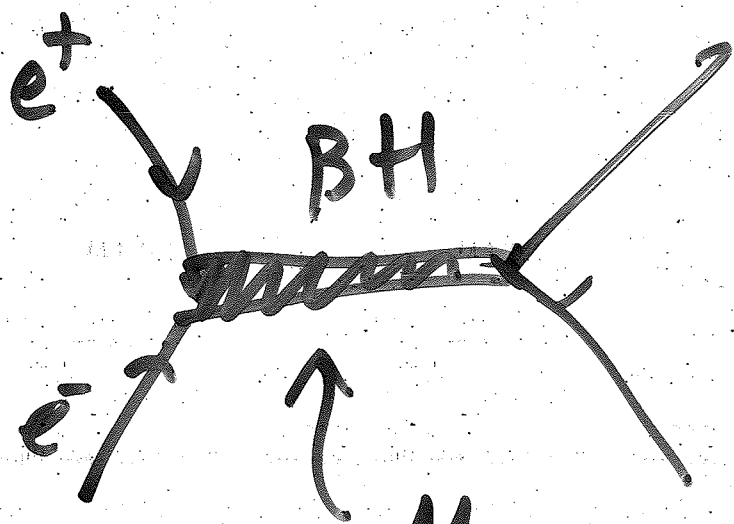
An oval containing the expression $M_{BH} \sim M_p$. An arrow from the equation above points to this oval.

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

$$e^+ + e^- \rightarrow BH$$



$$\underline{m < T}$$



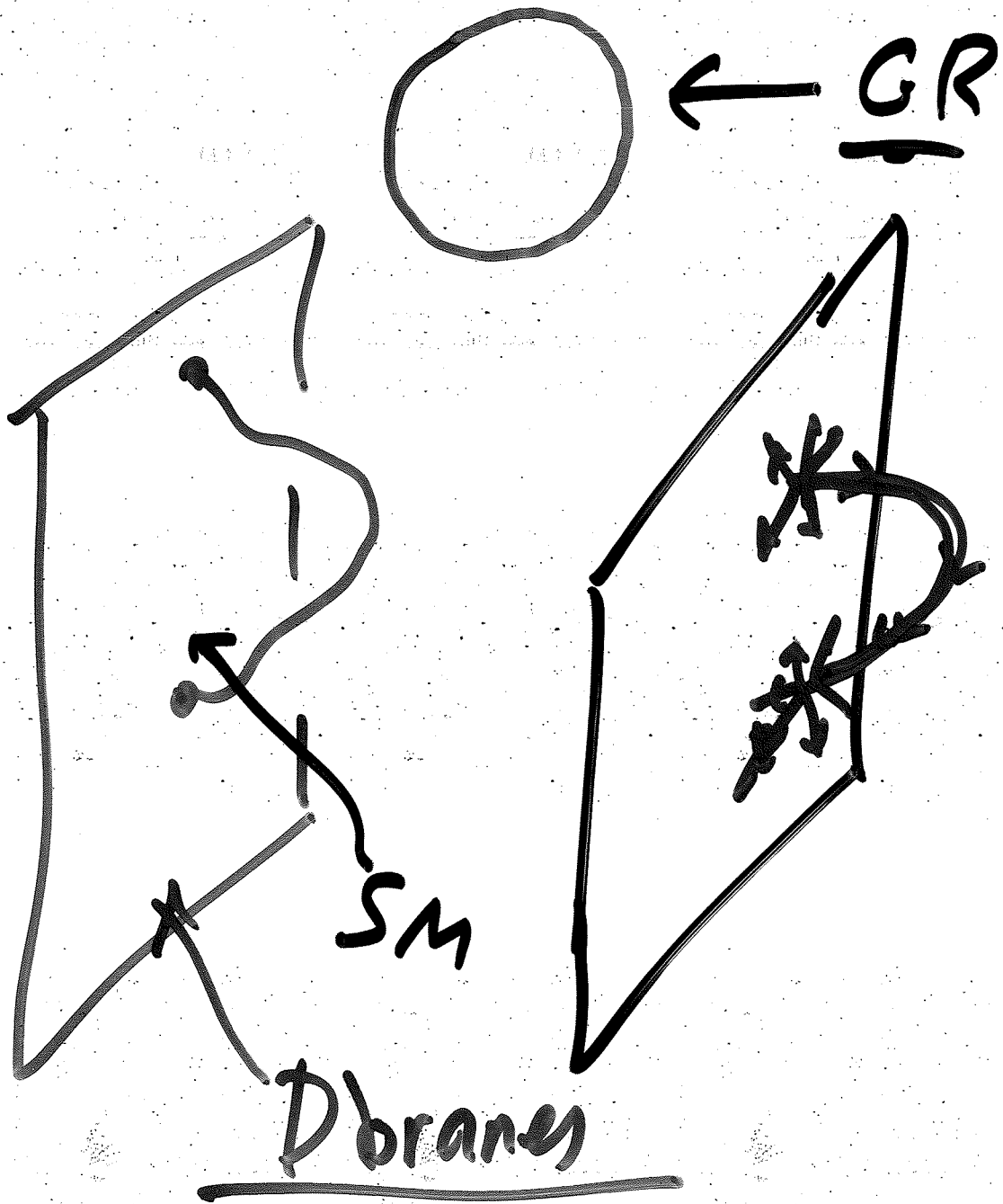
$$M_{BH} \sim M_* = \frac{1}{L_*}$$

$$r_g = L_*$$

$$T \sim M_*$$

$$r \sim M_*$$



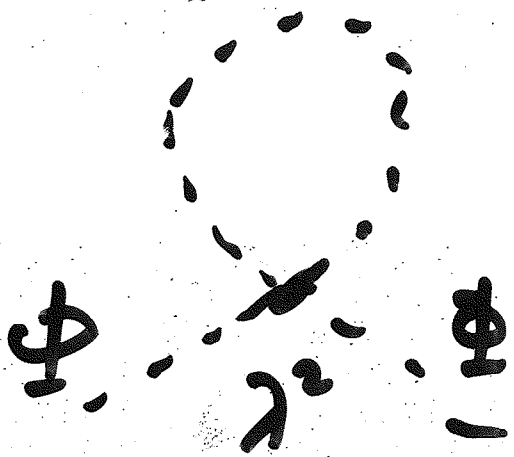
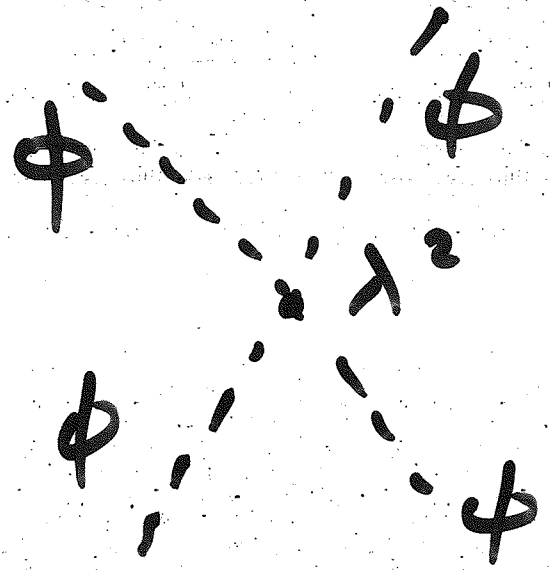


⊗

SUSY

SUSY

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



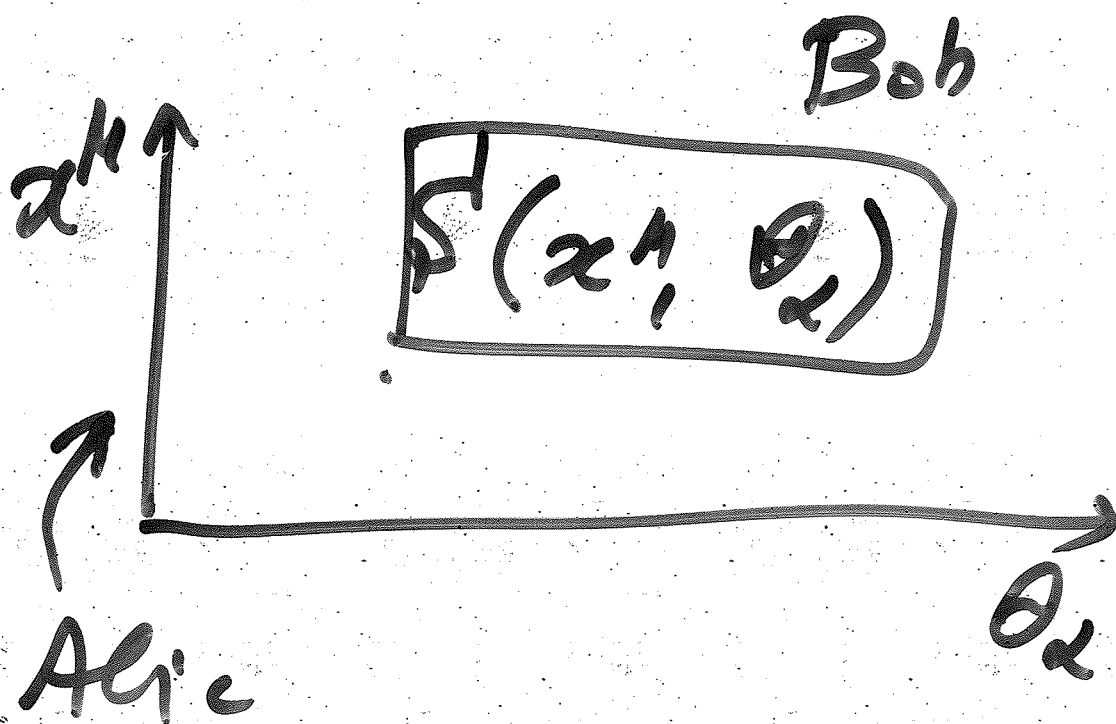
$$\rightarrow M_4 \propto \lambda^2 \Delta^2$$

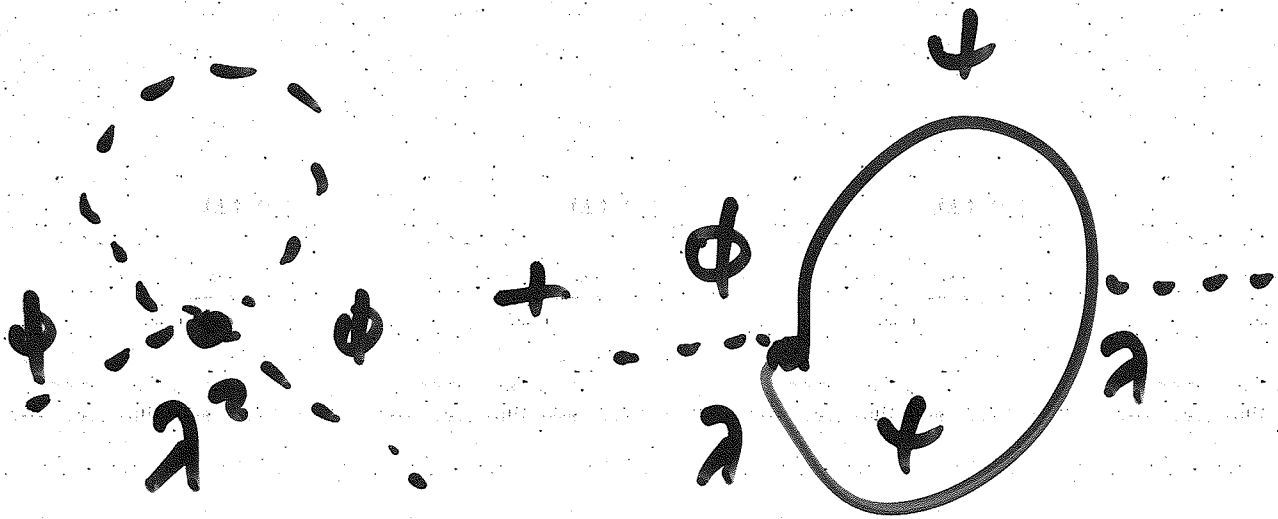
$$\lambda \Phi \psi \psi$$

$$x_{\mu} \rightarrow x_{\mu} + a_{\mu}$$

$$\theta_{\alpha} \rightarrow \theta_{\alpha} + \xi_{\alpha}$$

$$x_{\mu}, x_{\nu}$$





$$= 0.$$

$$\phi \leftrightarrow \psi$$


 ψ_L
 ψ_R

 \times
 m

$$m \rightarrow 0$$

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

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