

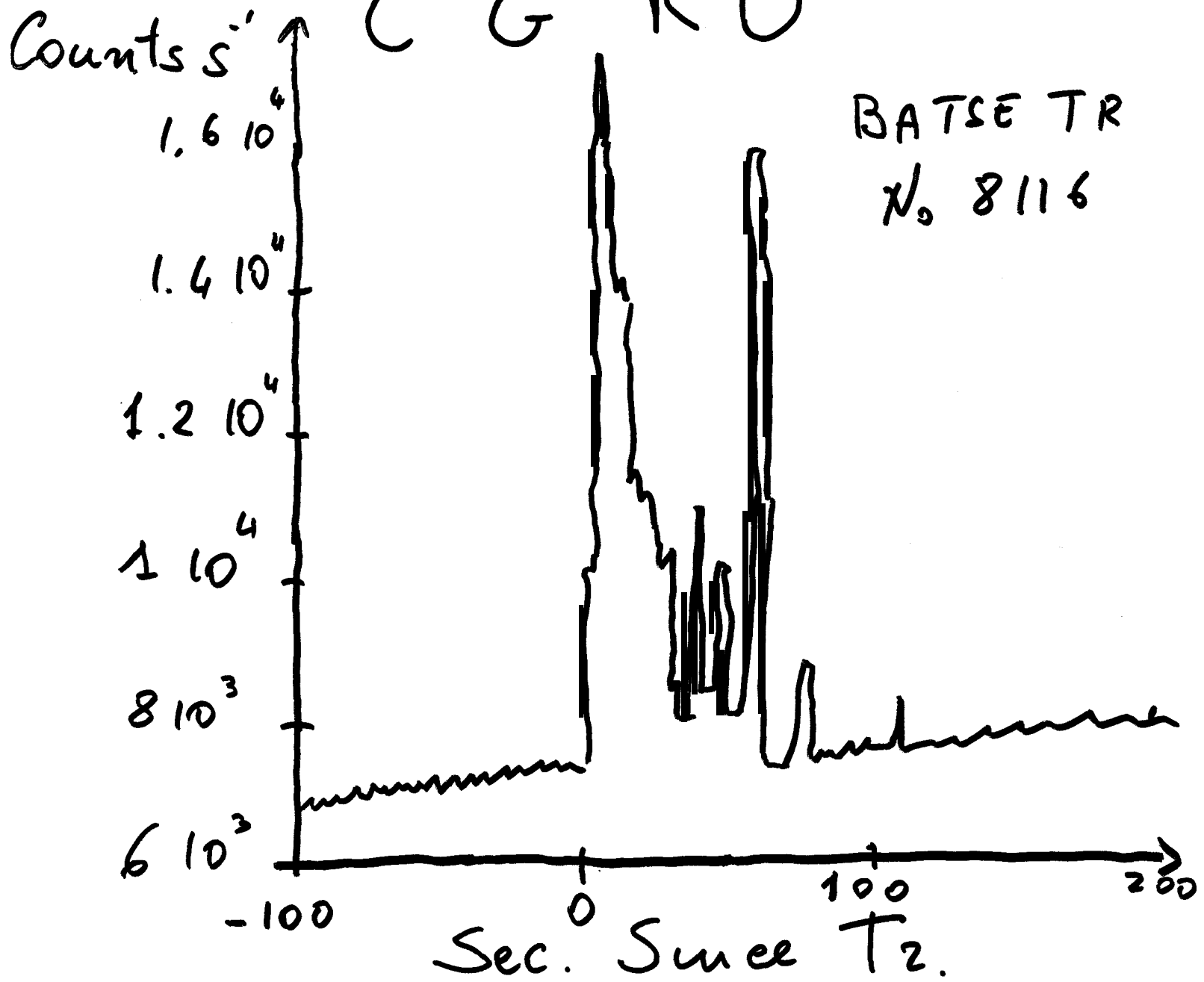
G R B

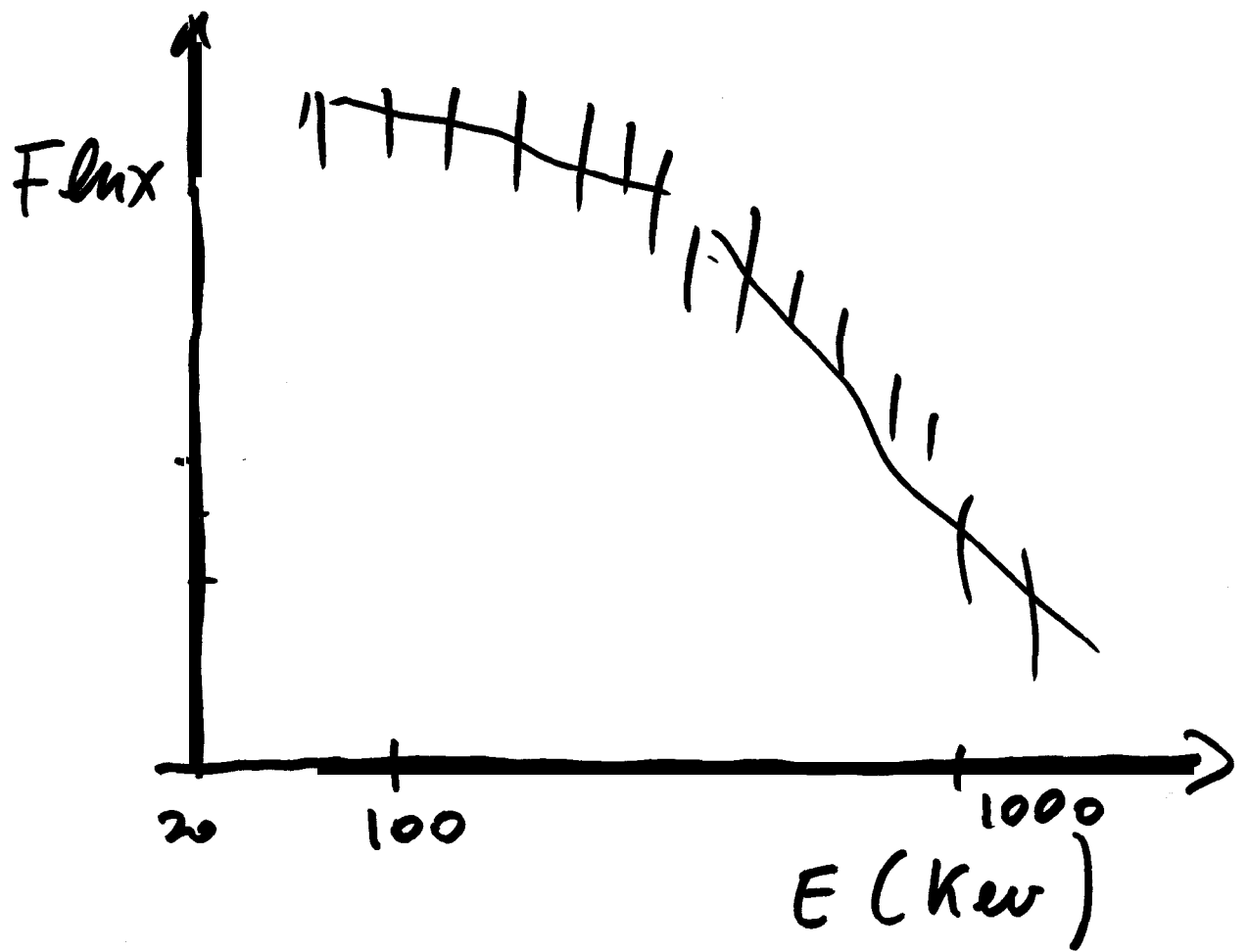
- a) What are they?
- b) First Obs. Vela Sat 67-73
Int. Pl. Net
- c) C.G. R.O. 91-00
- d) The big debate $G \leftrightarrow C$
- | | | |
|---|---------------------|------------------------------|
| C | $\pm 6 \mu\text{c}$ | $E \sim 10^{51} \text{ erg}$ |
| G | 0.1 Mpc | $E \sim 10^{43} \text{ "}$ |

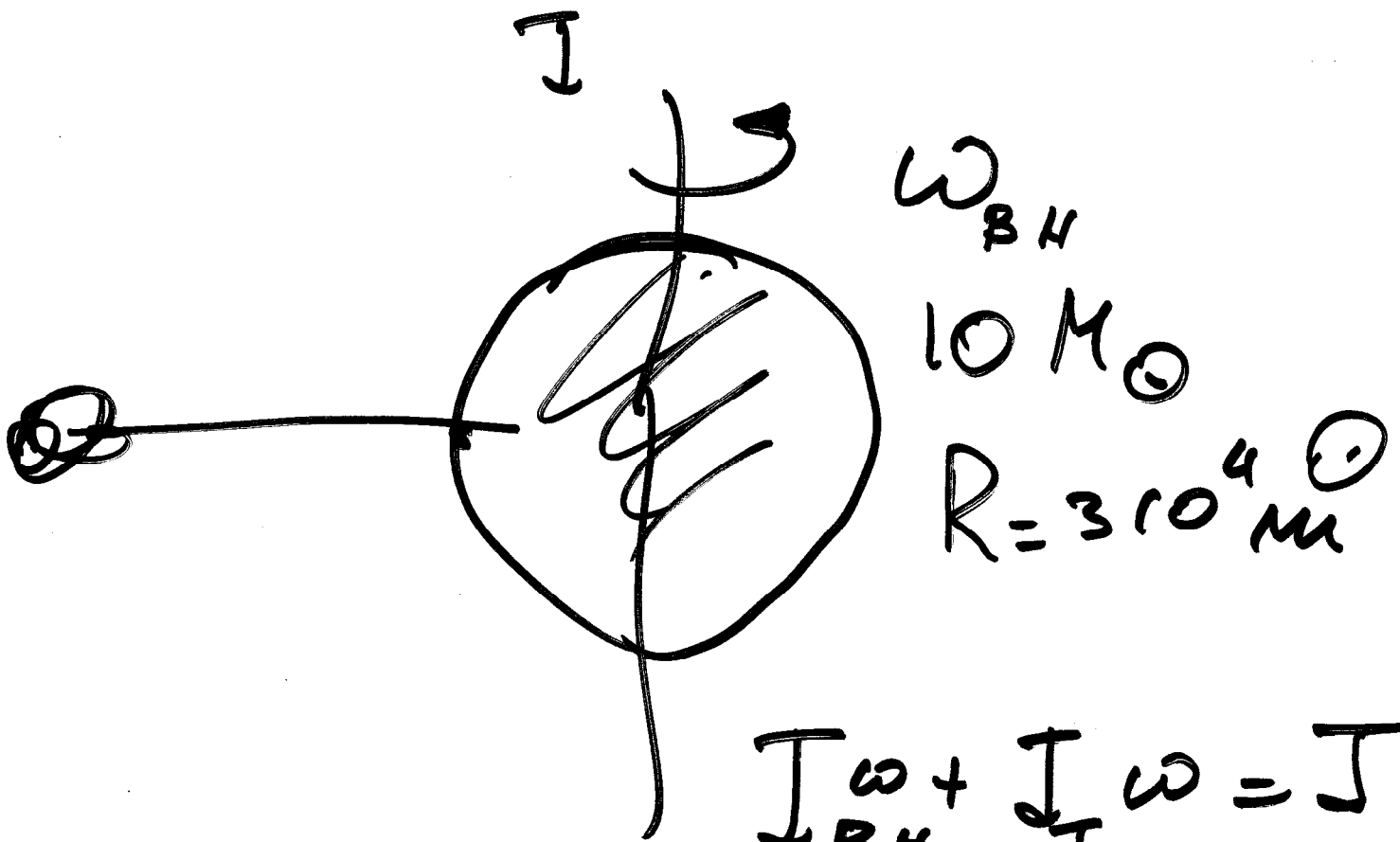
BATSE

on

C G R O





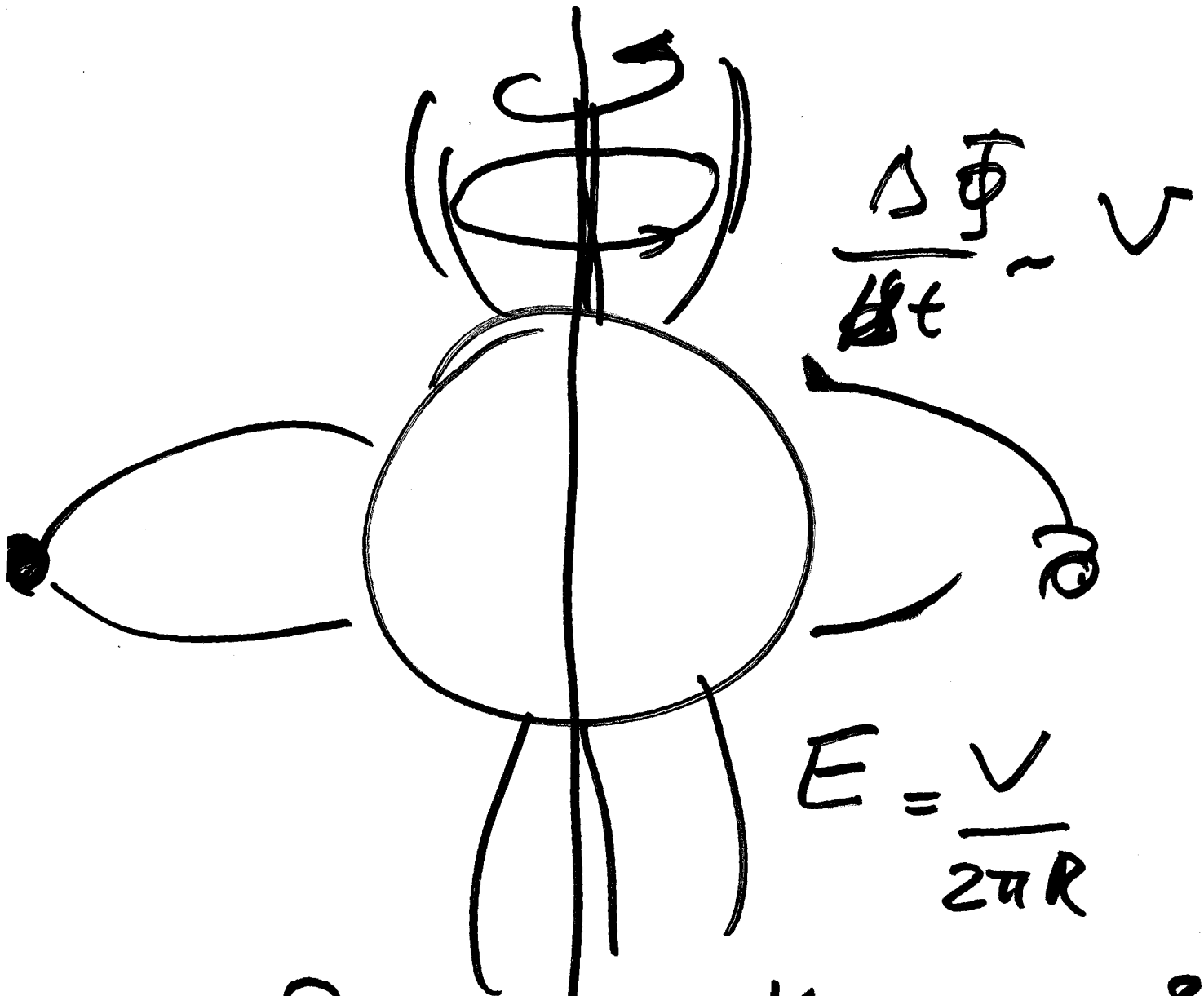


$$\Delta E \quad \frac{I_{BH} \omega + I_T \omega = J \omega}{}$$

$$I = \frac{2}{5} M R^2$$

$$I_{BH} \sim I_T \quad \omega_{BH} > \omega$$

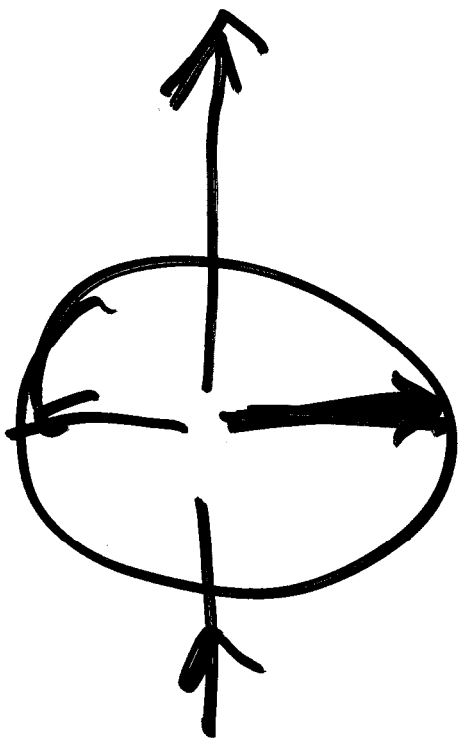
$$\Delta E \approx .8 \cdot 10^{53} \text{ erg}$$



B?

$e \hbar E = 2mc^2$

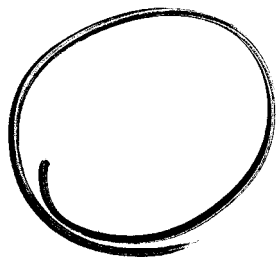
$B \sim 5 \cdot 10^{11} \text{ T}$



$$K_0 \gamma_L \gamma_R \parallel$$

$$\perp K_0 \gamma_R$$

$$\theta \sim \frac{1}{\gamma_L}$$



$$\gamma_2 \sim 20$$

$$E_{e^+e^-} \sim 10 \text{ MeV}$$

$$\gamma_R = 50$$