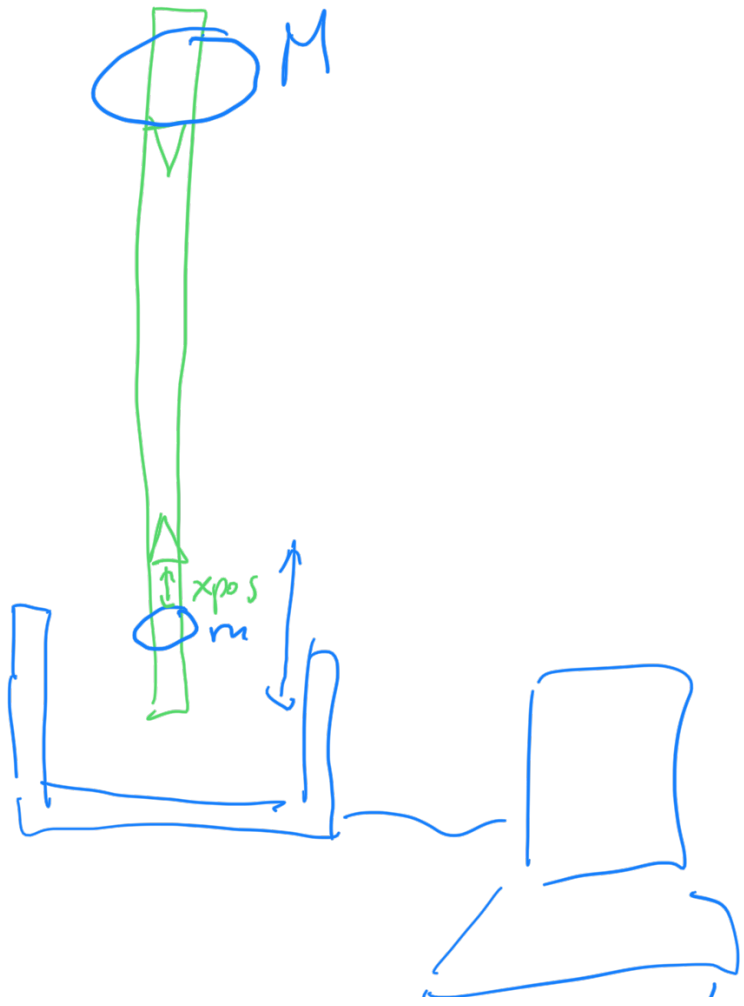
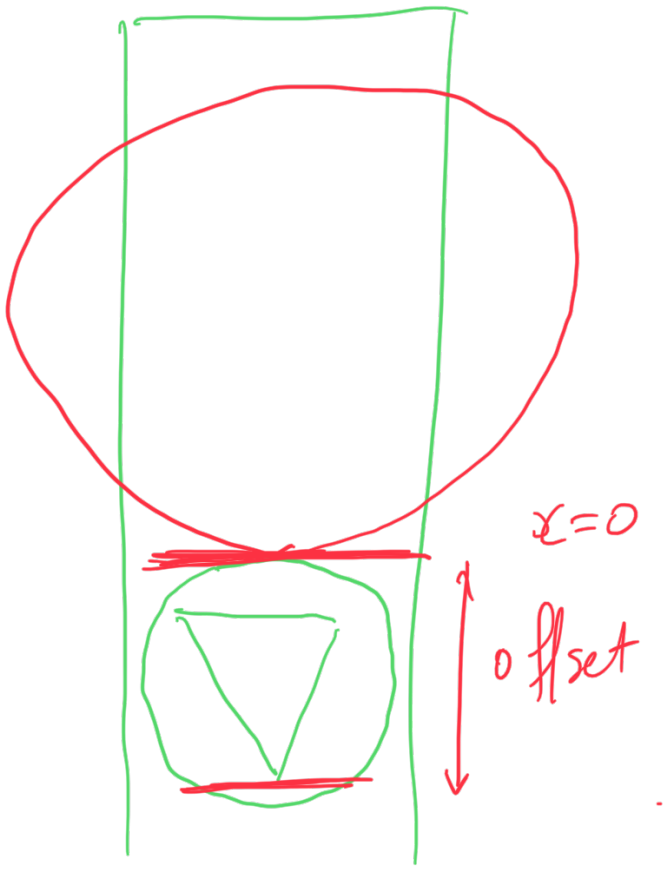
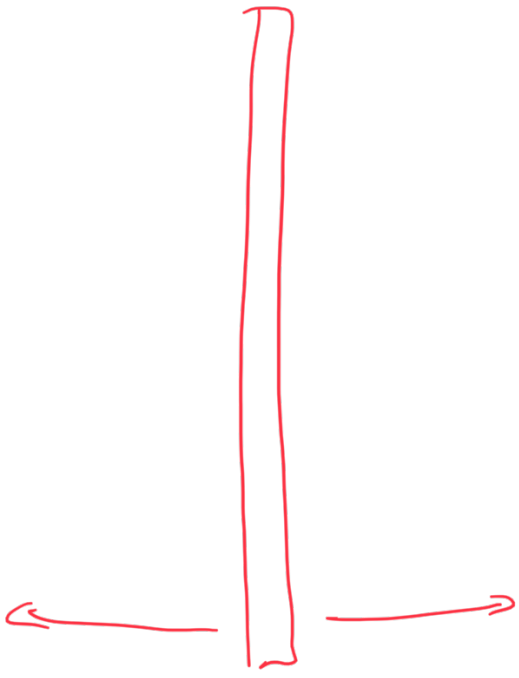
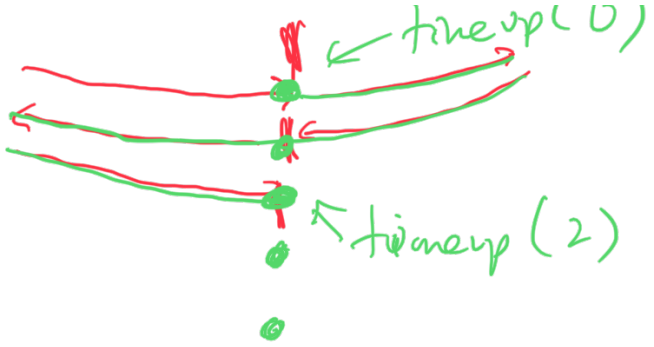
Physics 421 / PCSE503
Lecture 4

Kater's Pendulum



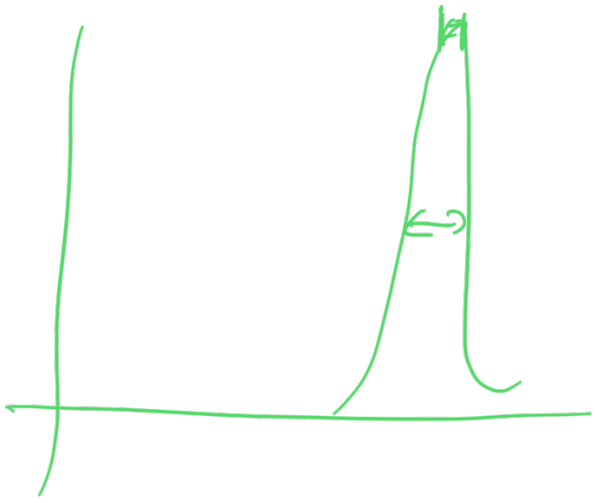

x=0
offset

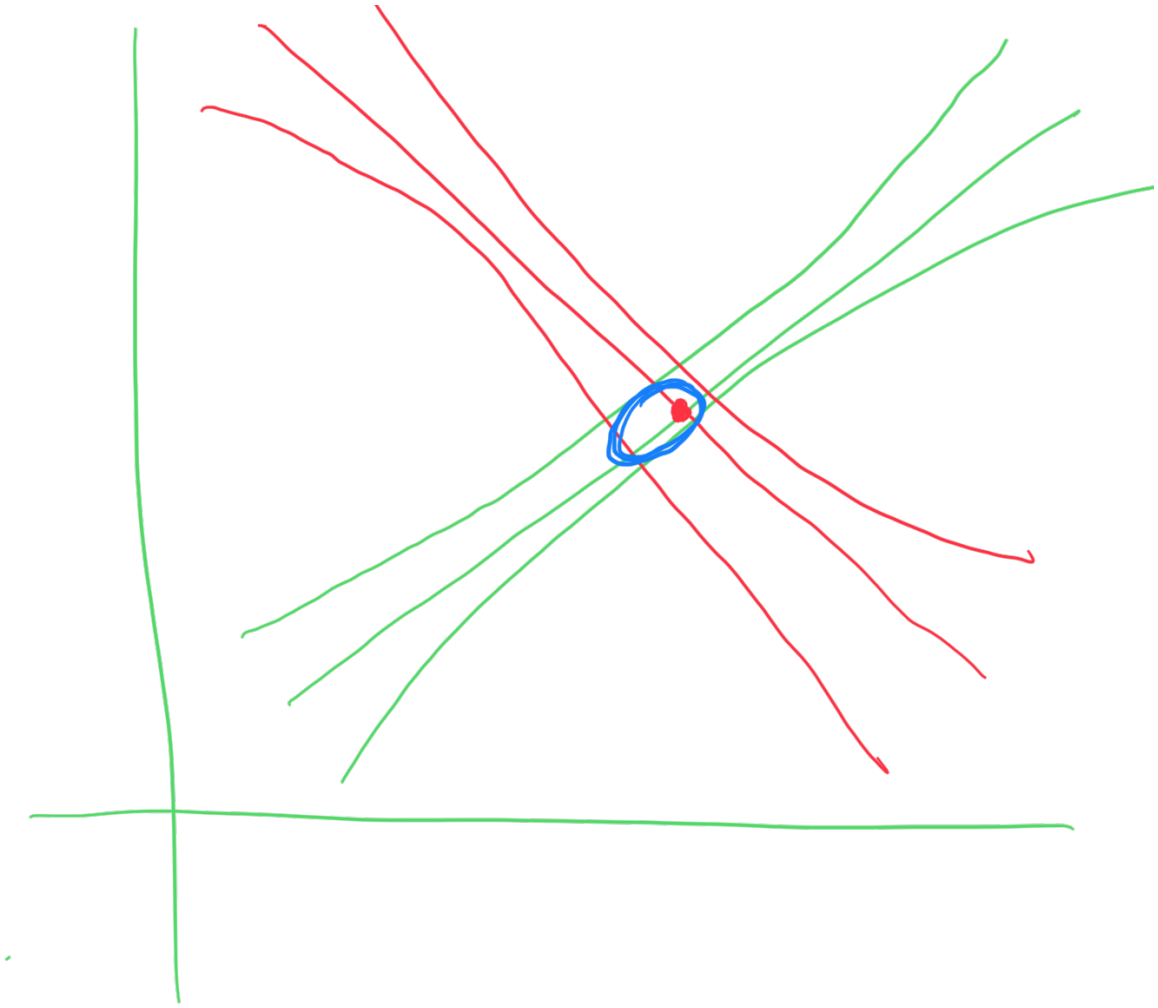


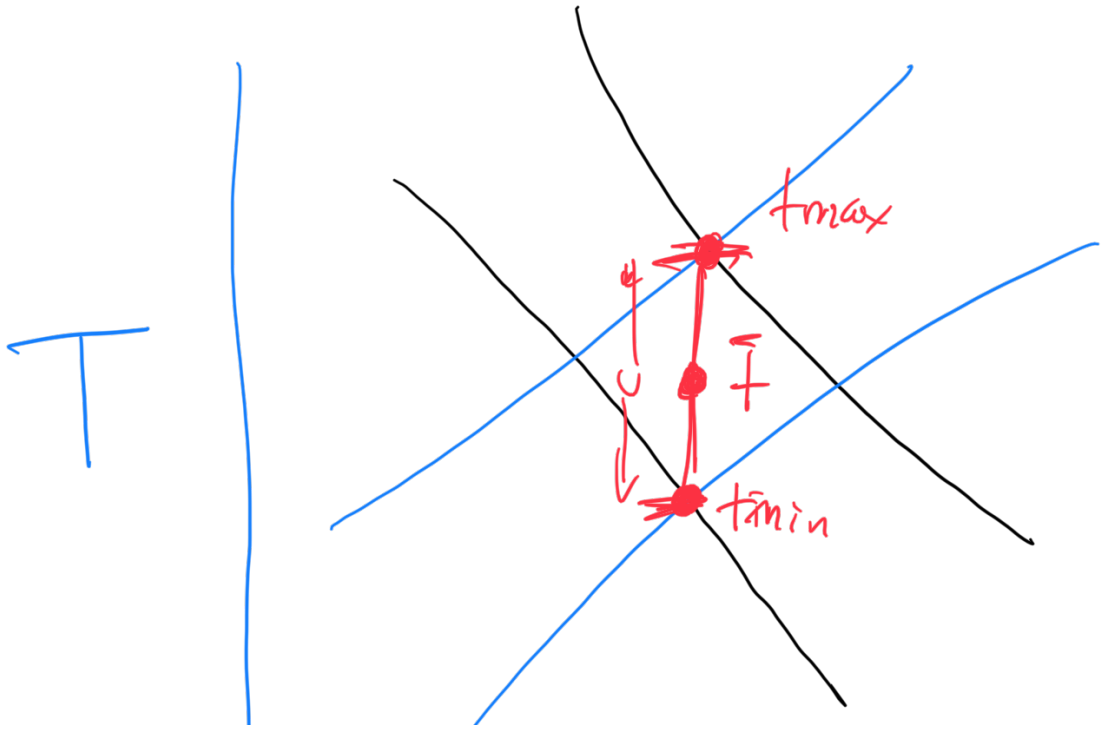


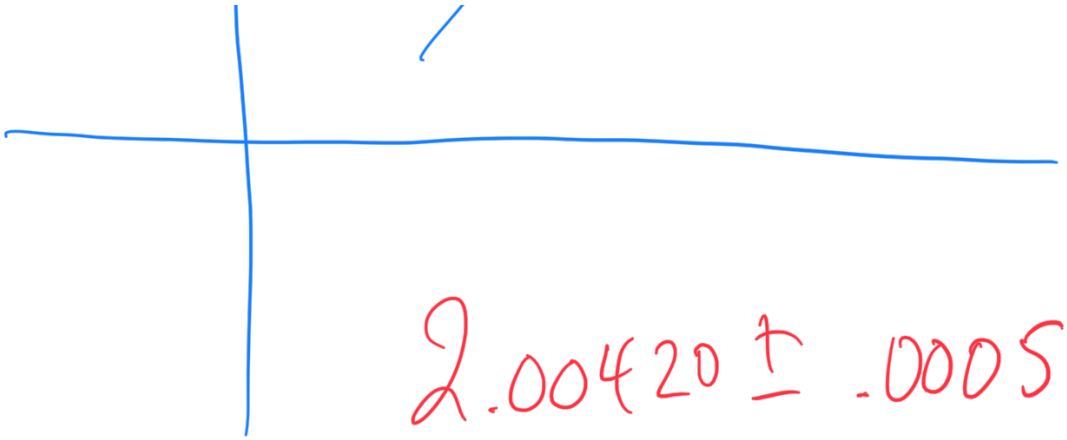
Physics 341

$$\text{Std. Error in Mean} \equiv \frac{\sigma}{\sqrt{N}}$$






T
tmax
tmin



$2.00420 \pm .00051$

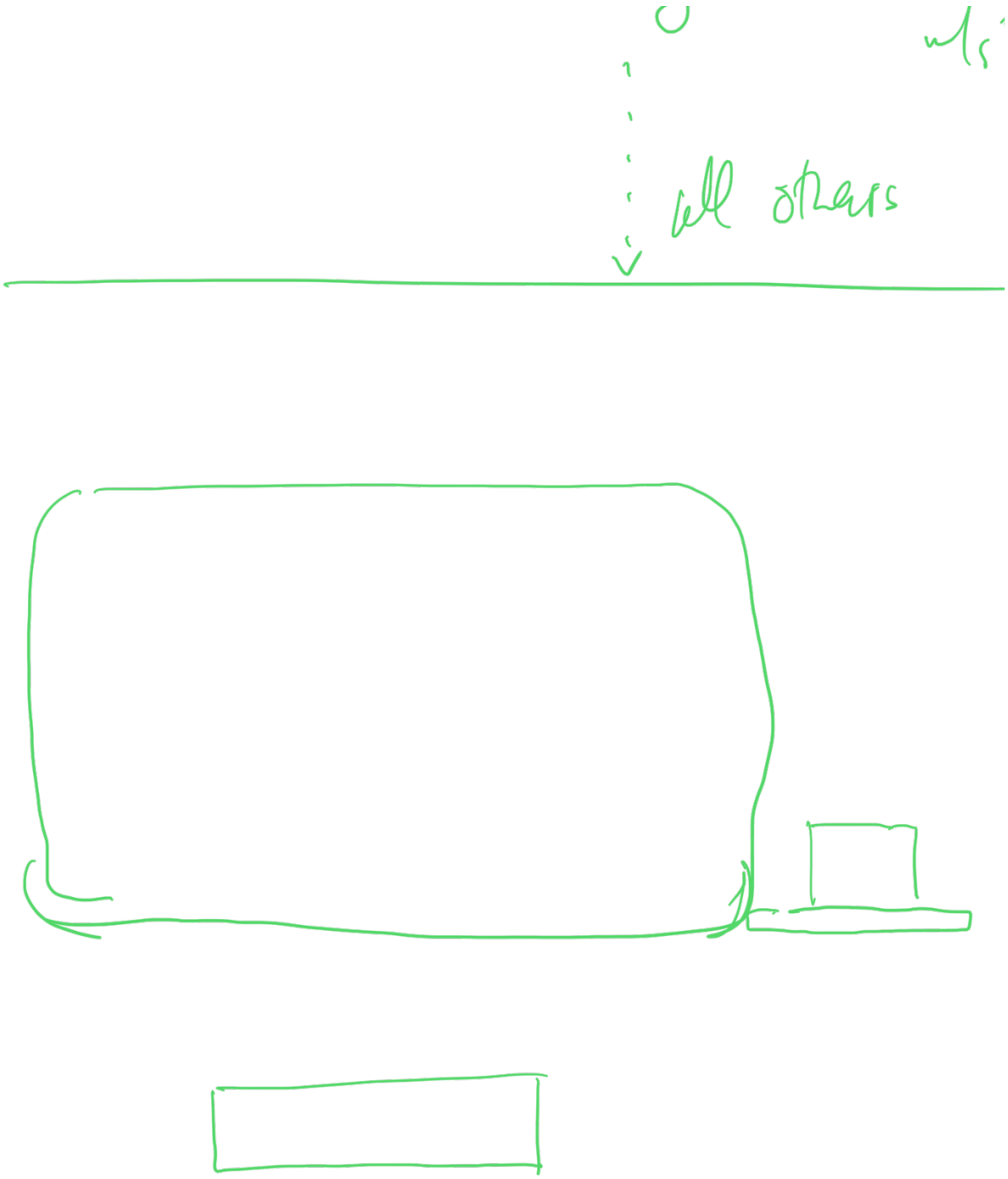
$$g = \frac{4\pi^2 L}{T^2}$$

$$g = 9.815 \pm 0.005$$

$$\neq 9.799$$

Why? → friction

$g < 9.799$


all others