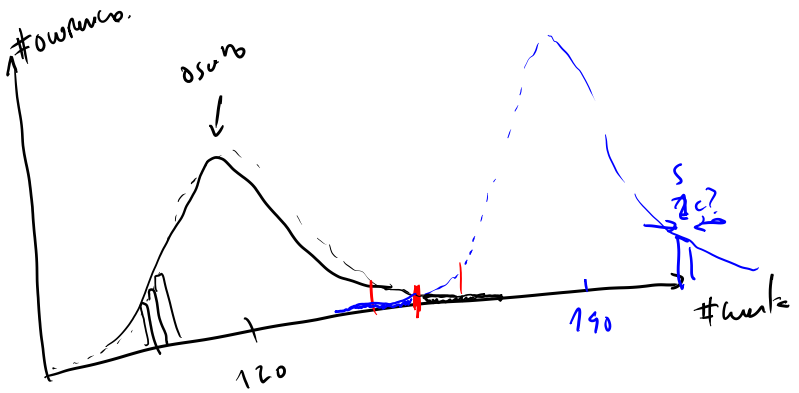
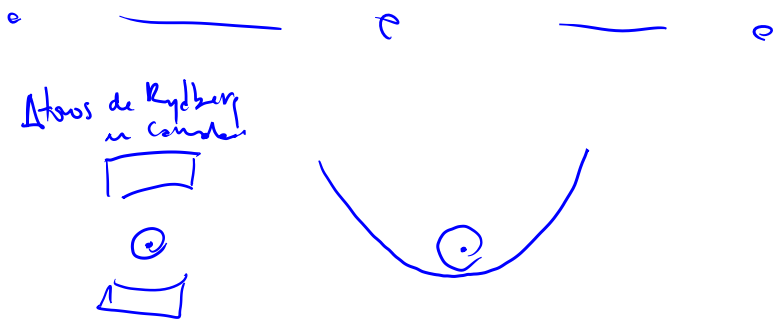
Notas Robi 18.11.2020

config 1 "oscuro"

config 2 "brillante"



Poisson! Dos brillos



$$H_{int} = \frac{1}{2}\left(\sigma^+ a + \sigma^- a^+\right)\eta$$

$$= e^{ikx} \approx e^{ik\hat{x}_0(a+a^+)} = e^{-i\eta(a+a^+)}$$

$$\approx 1 - i\eta(a+a^+)$$

Hint

$$E \cdot d = e^{ikx} \cdot d = e^{ikx_m} \underbrace{e^{ikx_{ml}}}_{1} \cdot d$$

$$= \left(1 - in(a + a^\dagger)\right) \underbrace{\left(\sigma^- + \sigma^-\right)}_{d}$$

$$= 1(\sigma^+ + \sigma^-) + in(a + a^\dagger)(\sigma^+ + \sigma^-)$$