

## HW week 1

Due on wednesday 5 September 2007

1. Write down how to read the following expression

(a)

$$\vec{L} = \vec{r} \times \vec{p}$$

(b)

$$I = I_0 e^{-br}$$

(c)

$$-\frac{\hbar^2}{2m} \frac{\partial^2 \psi(x)}{\partial x^2} + V(x) = i\hbar \frac{\partial \psi}{\partial t}$$

(d)

$$\Omega(E, V, N) = \int H(p_i, q_i) d^{3N} q d^{3N} p$$

2. Write a short passage (around three or four paragraph) about the Newton's second law of motion

**It is allowed even encouraged to work together with your group in doing the homework**