

Chapter 5

Born interpretation of the wave function Ψ

$$P(x) dx = |\Psi(x,t)|^2 dx$$

the probability that a particle will be found in an interval dx about the point x

Normalization condition

$$\int_{-\infty}^{+\infty} |\Psi(x,t)|^2 dx = 1$$

$\int_a^b |\Psi(x,t)|^2 dx$ is the probability

of finding the particle in the interval $a \leq x \leq b$.