

10 Physical Systems

$$\psi = \sum_j a_j \psi_j$$

pansion coefficients. If

1. Without loss of generality, we can assume that the norm squared is one:

$$1 = \sum_j |a_j|^2$$

1. The probability of finding the system in state j is

$$\sum_j e_j |a_j|^2$$

$$p_j = |a_j|^2$$

then be

$$E = \sum_j e_j p_j$$