習題四

1. Ch. 10 10-1 For the eigenstate with higher eigenvalue, measure . What are (or is) the possible values? What are (or is) the corresponding probabilities?

Solution:

A picture containing text

Description automatically generated

The possible values: . The corresponding probabilities are respectively: and

1. Ch. 10 ，calculate the expectation value of .

Measure , what are (or is) the possible values? What are (or is) the corresponding probabilities?

Hint: The expansion components 分量 of along equals .

Solutions:

The possible values are again: . The corresponding probabilities are respectively:

and .