

$$\text{if } \tilde{H}|\psi_n\rangle = E_n|\psi_n\rangle$$

Broken PT-Symmetry

$$PT|\psi_n\rangle \neq |\psi_n\rangle$$

$$E_n \neq E_n^*$$

$$E_n = E_n^*$$

PT-Symmetry

$$PT|\psi_n\rangle = |\psi_n\rangle$$

$$[\tilde{H}, PT] = 0$$

Hermiticity