

**GENERATING (2×2) PT-SYMMETRIC MATRICES USING PAULI MATRICES
AS PARITY OPERATOR: BROKEN SPECTRA AND STOP LIGHT IN
UNBROKEN SPECTRA AT UNEQUAL POINTS**

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ABSTRACT

We find that only real Pauli matrices can be considered as Parity operators under the direct generation of unbroken u PT-symmetric Hamiltonian. However complex form of Pauli matrix as parity operator can lead to broken PT-symmetry. We feel appropriate to correct the incorrect parity analysis reported elsewhere by some authors. Interestingly we show that present unbroken spectra consisting of unequal real eigenvalues can stop the light.

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