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(A,m)–SYMMETRIC COMMUTING TUPLES OF OPERATORS ON A HILBERT SPACE

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Abstract. Let $\mathbf{T} = (T_1, \cdots, T_d)$ and A be a commuting d-tuple of operators and a positive operator on a complex Hilbert space, respectively. We introduce an (A,m)-symmetric commuting tuple of operators and characterize the joint approximate point spectrum of (A,m)-symmetric commuting tuple $\mathbf{T}$. Next we introduce an (A,m)-expansive symmetric commuting tuple of operators and show basic properties of (A,m)-expansive symmetric commuting tuple.

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Paper MIA-22-63

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