

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

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*Abstract.* Let  $\mathbf{T} = (T_1, \dots, T_d)$  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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