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Geometric mean of states and transition amplitudes. (English) Zbl 1172.46044

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Summary: The transition amplitude between square roots of states, which is an analogue of Hellinger integral in classical measure theory, is investigated in connection with operator-algebraic representation theory. A variational expression based on geometric mean of positive forms is utilized to obtain an approximation formula for transition amplitudes.

MSC:

46L60 Applications of selfadjoint operator algebras to physics

46L53 Noncommutative probability and statistics

81R15 Operator algebra methods applied to problems in quantum theory

Cited in **3** Documents

Keywords:

transition amplitude; transition probability; quantum state

Full Text: [DOI](#) [arXiv](#)

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