

Quasi-compactness and uniform convergence of Markov operator nets on KB-spaces

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Abstract:

Kryloff and Bogoliouboff in 1937 introduced an important class of quasi-compact operators for which the uniform mean ergodic theorem can be obtained. Since this result, many contributions have been made in probability and ergodic theory using the spectral properties of quasi-compact operators. Quasi-compactness for strongly convergent semigroups and its relation to uniform ergodicity and to the asymptotic behaviour of the solutions of abstract Cauchy problems is also studied.

In this talk we investigate quasi-compactness of operator nets on KB-spaces which is equivalent to uniform convergence. Moreover we study the uniform ergodicity condition of a single operator or operator semigroups.

References:

1. Erkuşun Özcan, Nazife, Quasi-compactness and uniform convergence of Markov operator nets on KB-spaces, accepted

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