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Nazife Erkursun Ozcan* (erkursun.ozcan@hacettepe.edu.tr), Hacettepe University, Department of, Mathematics, Beytepe, 06800 Ankara, Turkey. *Ergodic Properties of Markov operator sequences on KB-spaces*. Preliminary report.

To characterize the asymptotic behavior of Markov operators, the concept of an attractor was used often. In this talk, a positive LR-sequence on KB-spaces with an attractor is investigated. Moreover it is shown that the positive LR-sequence on KB-spaces is strongly convergent (mean ergodic) if it has a weakly compact attractor. Moreover if the weakly compact attractor is an order interval, then a Markovian LR-sequence converges strongly to the finite dimensional fixed space. As a consequence we investigate also stability of LR-sequences of positive operators and existence of lower bound functions on KB-spaces.

Mathematics Subject Classification (2010): 47A35, 47B42, 47B65, 47D03, 47D06.

Keywords: Markovian LR-sequences, KB-space, strong convergence, attractor.

References: 1) Erkursun Ozcan, N. Asymptotic behavior of operator nets on KB-spaces, <http://arxiv.org/abs/1403.2114>.
2) Erkursun Ozcan, N. Stability and lower-bound functions of Markov semigroups on KB-spaces. (Received September 20, 2016)