ASYMPTOTICALLY I₂-CESÀRO EQUIVALENCE OF DOUBLE SEQUENCES OF SETS

Uğur ULUSU¹, Erdinç DÜNDAR¹ and Bünyamin AYDIN²

¹Department of Mathematics, AfyonKocatepe University, Afyonkarahisar/TURKEY

ulusu@aku.edu.tr

¹Department of Mathematics, AfyonKocatepe University, Afyonkarahisar/TURKEY

edundar@aku.edu.tr

²Education faculty, Necmettin Erbakan University,

Konya/TURKEY

baydin@konya.edu.tr*

Abstract:In this paper, we dened concepts of asymptotically I_2 -Cesaro equivalence and investigate the relationships between the concepts of asymptotically strongly I_2 -Cesaro equivalence, asymptotically strongly I_2 -lacunary equivalence, asymptotically p-strongly I_2 -Cesaro equivalence and asymptotically I_2 -statistical equivalence of double sequences of sets.

Keywords: Asymptotically equivalence, Cesarosummability, lacunary sequence, statistical convergence, I-convergence, double sequences of sets, Wijsman convergence.

References:

- [1] M. Baronti, P. Papini, Convergence of sequences of sets, In: Methods of functional analysis in approximation theory, ISNM 76, Birkhauser-Verlag, Basel (1986).
- [2] G. Beer, On convergence of closed sets in a metric space and distance functions, Bull. Aust. Math. Soc. 31 (1985) 421432.
- [3] G. Beer, Wijsman convergence: A survey, Set-Valued Var. Anal. 2 (1994) 7794.
- [4] P. Das, E. Sava³, S. Kr. Ghosal, On generalized of certain summability methods using ideals, Appl. Math. Letter 36 (2011) 15091514.