

$\mathcal{I}$ -CESÀRO SUMMABILITY OF SEQUENCES OF SETS

Uğur Ulusu<sup>1</sup>, Ömer Kişi<sup>2</sup>

<sup>1</sup> *Afyon Kocatepe University, Faculty of Science, Department of Mathematics, 03200, Afyonkarahisar, Turkey*

<sup>2</sup> *Bartın University, Faculty of Science, Department of Mathematics, 74100 Bartın, Turkey*

**MSC 2010:** 40A05; 40A35

**Abstract**

In this paper, we defined concept of Wijsman  $\mathcal{I}$ -Cesàro summability for sequences of sets and investigate the relationship between the concepts of Wijsman strongly  $\mathcal{I}$ -Cesàro summability, Wijsman strongly  $\mathcal{I}$ -lacunary summability, Wijsman  $p$ -strongly  $\mathcal{I}$ -Cesàro summability and Wijsman  $\mathcal{I}$ -statistical convergence.

**Keywords:** Cesàro summability, statistical convergence, lacunary sequence,  $\mathcal{I}$ -convergence, sequence of sets, Wijsman convergence.

**References**

- [1] J.-P. Aubin, H. Frankowska, *Set-valued analysis*, Birkhauser, Boston (1990).
- [2] M. Baronti, P. Papini, *Convergence of sequences of sets*, In: *Methods of functional analysis in approximation theory*, ISNM 76, Birkhauser-Verlag, Basel (1986).
- [3] G. Beer, *On convergence of closed sets in a metric space and distance functions*, *Bull. Aust. Math. Soc.* **31** (1985) 421–432.
- [4] H. Fast, *Sur la convergence statistique*, *Colloq. Math.* **2** (1951) 241–244.
- [5] J. A. Fridy, C. Orhan, *Lacunary Statistical Convergence*, *Pacific J. Math.* **160**(1) (1993) 43–51.
- [6] Ö. Kişi, F. Nuray, *New Convergence Definitions for Sequences of Sets*, *Abstract and Applied Analysis*, Volume 2013, Article ID 852796, 6 pages. <http://dx.doi.org/10.1155/2013/852796>.

---

<sup>1</sup>First Author's e-mail: ulusu@aku.edu.tr

<sup>2</sup>Second Author's e-mail: okisi@bartin.edu.tr