



## ON $\mathcal{I}$ -DEFERRED STATISTICAL CONVERGENCE IN MEASURE OF COMPLEX UNCERTAIN SEQUENCES

AMIT HALDER

Department of Mathematics  
Tripura University (A Central University), Suryamaninagar-799022, Agartala, India.  
(E-mail: mit2905halder@gmail.com)

SHYAMAL DEBNATH

Department of Mathematics  
Tripura University (A Central University), Suryamaninagar-799022, Agartala, India.  
(E-mail: shyamalnitamath@gmail.com)

and

AYHAN ESI\*

Department of Basic Eng. Sci.(Math.Sect)  
Malatya Turgut Ozal University, 44100, Malatya, Turkey.  
(E-mail: ayhan.esi@ozal.edu.tr)

**Abstract.** In this paper, the concepts of  $\mathcal{I}$ -deferred statistical convergence in measure of complex uncertain sequence were defined and studies some inclusion relations between  $\mathcal{I}$ -deferred statistical convergence in measure and strongly  $\mathcal{I}$ -deferred Cesàro summable in measure of complex uncertain sequence. We observe that, in complex uncertain space, a sequence is strongly  $\mathcal{I}$ -deferred Cesàro summable in measure if and only if the sequence is  $\mathcal{I}$ -deferred statistical convergence in measure. Also, we introduced the new notion of  $\mathcal{I}$ -deferred statistical Cauchy sequence in measure.

---

\*Corresponding author

Communicated by Editors; Received October 29, 2025

AMS Subject Classification: 60B10, 40A35, 40G15.

Keywords: Uncertainty theory,  $\mathcal{I}$ -convergence,  $\mathcal{I}$ -statistical convergence,  $\mathcal{I}$ -deferred statistical convergence.