South East Asian J. of Mathematics and Mathematical Sciences
Vol. 20, No. 2 (2024), pp. 235-246

DOI: 10.56827/SEAJMMS.2024.2002.18 **ISSN (Online): 2582-0850**

ISSN (Print): 0972-7752

ON STATISTICAL BOUNDEDNESS IN PARTIAL METRIC SPACES

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(**Received:** *Jun. 04, 2024* **Accepted:** *Aug. 17, 2024* **Published:** *Aug. 30, 2024)*

Abstract: Here in this paper, we have an idea of statistical boundedness for a partial metric space (X, φ) where φ is partial metric on X and establish the relationship between statistical convergence and statistical boundedness. Besides this, statistical analogue of monotone convergence theorem of reals has been established.

Keywords and Phrases: Statistical convergence, partial metric space, statistical boundedness.

2020 Mathematics Subject Classification: 46A45, 40A05, 40A35.

1. Introduction

Although the credit of introducing the notion of statistical convergence was given independently to Fast [7] and Steinhaus [27], but the initial idea of this notion, i.e., "almost convergence" was given by Zygmund [31] in 1935 in his book "Trignometric Series". After these studies, Schoenberg [26] studied this concept as a summability method. Presently, this field has become a main choice of many researchers. The concept of statistical convergence has been extended for arbitrary