

**RELATIONS ON CONTINUITIES AND BOUNDEDNESS IN  
INTUITIONISTIC FUZZY PSEUDO NORMED LINEAR SPACES**

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**Abstract:** In this study, different types of intuitionistic fuzzy continuities (IFCs) and intuitionistic fuzzy boundedness (IFBs) in intuitionistic fuzzy pseudo normed linear space(IFPNLS) are studied. Relations on intuitionistic fuzzy continuities and intuitionistic fuzzy boundedness are investigated.

**Keywords and Phrases:** Strongly intuitionistic fuzzy continuity, weakly intuitionistic fuzzy continuity, sequentially intuitionistic fuzzy continuity, strongly intuitionistic fuzzy bounded, weakly intuitionistic fuzzy bounded, uniformly intuitionistic fuzzy bounded.

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## 1. Introduction

The fuzzy norm concept was originated by A. Katsaras [11, 12]. Subsequently, this notion developed by many researchers, viz. C. Falbin [9], S. C. Cheng and J. N. Moderson [3], T. Bag and S. K. Samanta [1, 2], I. Golet [10] and many others. Chasing the conviction of Cheng-Moderson [3], Bag-Samanta [1] considered another definition of fuzzy norm, it became most acceptable among researchers. Motivated by the work of Bag-Samanta [1, 2], S. Nădăban [15] introduced the idea