

PARSEVAL'S EQUALITY IN FUZZY NORMED LINEAR SPACES

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Abstract. In this paper, we investigate Parseval's equality and define the fuzzy frame on Felbin fuzzy Hilbert spaces. For showing the importance of defining fuzzy frame, we know that, in the classical Hilbert space, $C(\Omega)$ is not normable, but, in this manuscript, we prove that $C(\Omega)$ (the vector space of all continuous functions on Ω) is normable in a Felbin fuzzy Hilbert space and so the defining fuzzy frame on $C(\Omega)$ is possible. These consequences of the category of fuzzy frames in Felbin fuzzy Hilbert spaces are wider than the category of the frames in the classical Hilbert spaces.

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