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ON $\mathscr{I}$–CAUCHY SEQUENCES IN 2–NORMED SPACES

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Abstract. The concept of $\mathscr{I}$-convergence is a generalization of statistical convergence and it is depended on the notion of the ideal $\mathscr{I}$ of subsets of the set $\mathbb{N}$ of positive integers. In this paper for sequences in 2-normed space the relationship between $\mathscr{I}$-convergence and usual convergence along a filter $\mathscr{F}(\mathscr{I})$ associated with an admissible ideal $\mathscr{I}$ with property (AP) is investigated. We introduce the concepts $\mathscr{I}$-Cauchy and $\mathscr{I}^*$-Cauchy sequences in 2-normed spaces and study their certain properties.

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