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Spaces not distinguishing pointwise and \mathcal{I} -quasinormal convergence

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Abstract: In this paper we extend the notion of quasinormal convergence via ideals and consider the notion of \mathcal{I} -quasinormal convergence. We then introduce the notion of \mathcal{IQN} ($\mathcal{I}wQN$) space as a topological space in which every sequence of continuous real valued functions pointwise converging to 0, is also \mathcal{I} -quasinormally convergent to 0 (has a subsequence which is \mathcal{I} -quasinormally convergent to 0) and make certain observations on those spaces.

Keywords: ideal, filter, \mathcal{I} -quasinormal convergence, Chain Condition, AP -ideal, \mathcal{IQN} space, $\mathcal{I}wQN$ space

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