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A GENERALIZATION OF β-COMPACT SPACE AND β-PERFECT FUNCTIONS

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Abstract. In this paper, we have introduced a new covering space, namely βJ-space in terms of β-closed sets [1] and β-compactness [2] along with its several properties. We have found several characterizations of βJ-spaces via β-open sets, β-frontiers. Further, we have introduced two new functions β-perfect function and β-boundary β-perfect function between two topological spaces along with their some characterizations via filters, β-open covers of the domain spaces of the functions. We have also achieved a characterization of β-compact space via β-perfect functions. Farther, we have investigate some applications of these two new functions on β-compact spaces and βJ-spaces.

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