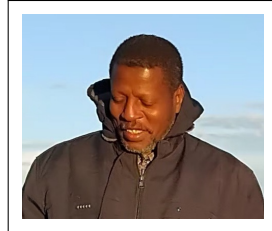


The Kuratowski Function and the Measure of Noncompactness



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Abstract

In this talk, we present the definition of the Kuratowski and relation with measure of noncompactness and discuss its relationship with Cantor's intersection theorem. We also introduce several notions of measures of noncompactness and establish some classical fixed point theorems based on these concepts. Furthermore, we investigate the connections between measures of noncompactness and linear operators. We Also weak measure of noncompactness and fixed point theory. Finally, we conclude with an overview of different notions of degrees of nondensifiability.

Mathematics Subject Classification : 54H25, 47H08, 47H10.

Keywords and phrases: Kuratowski, measure of noncompactness; fixed point, weak measure of noncompactness, degrees of nondensifiability.

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