

1044-47-230

Claudio H. Morales* (morales@math.uah.edu), Department of Mathematics, University of Alabama in Huntsville, Huntsville, AL 35899. *The Leray-Schauder condition for continuous pseudo-contractive mappings.*

Over thirty years ago, Kirk raised the question whether a nonexpansive mapping defined on a convex domain with nonempty interior, under the Leray-Schauder condition has a fixed point, provided that its domain enjoys the Fixed Point Property with respect to nonexpansive self-mappings. In fact, in the present work we have found the answer to this question to be positive, even for a larger class of mappings. The result, indeed, represents an important extension of a large number of theorems obtained in the last forty years. (Received September 02, 2008)