Punts periòdics de les aplicacions contínues del cercle.

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Abstract.-

In this work we study the periodic points of the continuous map f of the circle into itself. Our results are obtained using the lifting map of f and its degree. One basic tool of this paper is an analogous theorem in the circle of Li and Yorke's theorem in the real line.

We obtain a complete answer for a degree different of -1 or 1. For a map of degree zero we find again the theorem of Sarkovskii and, for a map of degree different of -1, 0, 1 we have periodic points of all periods with one exception. This exception occurs when the degree is -2 and there is no periodic point of period two. We also give a complete result for a homeomorphism of the circle (it is a particular case of degree -1 or 1) and partial results for a continuous map of degree -1 or 1.