

UFSCar

DEPARTAMENTO DE MATEMÁTICA

COLÓQUIO

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Falará sobre:

**A symmetry of maps implies its chaos, i.e.
gives ∞ many periodic points**

Resumo. We assume that X is a compact connected polyhedron, G is a finite group acting freely on X , and $f : X \rightarrow X$ an G -equivariant map. We find formulae for the least number of n -periodic points in the equivariant homotopy class of f , i.e. $\inf_h \#\text{Fix}(h^n)$ (where h is G -homotopic to f). As an application we prove that the set of periodic points of an equivariant map is infinite provided the action on the rational homology of X is trivial and the Lefschetz number $L(f^n)$ does not vanish for infinitely many indices n commensurable with the order of G . Moreover, at least linear growth, in n , of the number of points of period n is shown.

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