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SEMINARIO CONJUNTO

OPTIMIZACIÓN Y EQUILIBRIO & SISTEMAS DINAMICOS

EXPOSITOR

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Title: Theorems of Borsuk-Ulam Type

Abstract: The Borsuk-Ulam Theorem states that for any continuous function f from S^n to R^n there is some x in S^n such that f(x) = f(-x). Replace S^n by the boundary of some open set A of E=R^{n+1} and replace R^n by some n dimensional manifold B. The conclusion of the theorem remains, with the pair x, -x replaced by some x,y on the boundary whose convex combinations contain some fixed point z in the interior of that open set. Indeed there is a topological structure to all such solutions when the z is considered a variable. If B is not a manifold, the conclusion fails. However if we allow for a finite subset x_1,...., x_n such that z is in the convex hull of the x_i, then the conclusion holds again. This is related to principal-agent situations studied in economics.

Jueves 27 de junio a las 16:00 hrs, Sala de Seminarios CMM, John Von Neumann, Beauchef 851, Torre Norte, Piso 7.

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