

STRUCTURAL STABILITY OF VECTOR FIELDS WITH VARIOUS SHADOWING

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ABSTRACT. (Joint work with K. sakai) In this talk we introduce the notion of shadowing and its recent results in connection with the hyperbolic dynamics. Also we prove the following. Suppose that a C^1 vector field X on a compact C^∞ manifold has no singularities. Then X is in the C^1 interior of the set of vector fields with the shadowing property if and only if X satisfies both Axiom A and the strong transversality condition; that is, X is C^1 structurally stable.