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Title:

Structural stability of vector fields with shadowing properties corredponding to some classes of reparametrizations

Abstract:

We study \$C^1\$-interiors of sets of vector fields with various shadowing properties. We prove that in the case of Lipschitz shadowing property such \$C^1\$-interior is equal to the set of structurally stable vector fields. In the case of orbit shadowing property the same result is proved for vector fields without rest points. For the case of oriented shadowing property we introduce the notion of vector fields of type \$\textbf{B}\$ and prove that \$C^1\$-interior of the set of vector fields with the oriented shadowing property that are not vector fields of type \$\textbf{B}\$ contains only structurally stable vector fields.