

LIPSCHITZ PERTURBATIONS OF MORSE-SMALE SEMIGROUPS

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In this work we deal with Lipschitz continuous perturbations of gradient Morse-Smale semigroups (all critical elements are equilibria). We study the the permanence of connections between equilibrium points (structural stability) when subjected to Lipschitz perturbations. To this end we extend the notions of *hyperbolicity* and *transversality* to the cases for which differentiability is no longer required.

REFERENCES

- [1] M.C Bortolan, C.A.E.N Cardoso, A.N.Carvalho, L. Pires; *Lipschitz perturbations of Morse-Smale semigroups* Journal of differential equations, 269, 1904-1943, 2020.

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