

Bifurcations of Morse decompositions: A case study

Hiroshi Kokubu^a

^aDepartment of Mathematics, Kyoto University, Kyoto 606-8502, Japan

I discuss how some of the standard bifurcations, such as the saddle-node bifurcation and the boundary crisis, may be detected from changes of Morse decompositions. This kind of approach to the bifurcation theory will be important for the development of rigorous topological computation of dynamical systems.