

74. Zvi Artstein, **Stability in the presence of singular perturbations.** Nonlinear Analysis 34 (1998), 817-827

Abstract. The paper examines the Liapunov asymptotic stability of a motion when the dynamics is coupled with a singularly perturbed fast motion. It is not required that the fast dynamics converge when the slow state is fixed. Rather, the limit as the small parameter tends to zero of the slow solution is portrayed by solutions of a differential inclusion generated by invariant measures of the fast motion.

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