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Paul Jianjun Tian* (tianjj@mbi.ohio-state.edu), 231 West 18th Ave, MBI, The Ohio State University, Columbus, OH 43210. *Finite-time perturbations of dynamical systems and applications*. Preliminary report.

Finite-time perturbations of dynamical systems and applications

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We study finite-time perturbations of dynamical systems. We prove that finite-time perturbed dynamical systems are asymptotically equivalent to unperturbed dynamical systems. And so the asymptotical behavior of finite-time perturbed systems can be studied by unperturbed systems. As an example, we study a system perturbed by drug treatments. (Received February 04, 2006)