

962-34-872

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Hybrid systems incorporates both continuous components, usually called plants, which are governed by differential equations, and also digital components such as digital computers. In addition, from a modeling point of view, it is perhaps more realistic to model a phenomena by a dynamic system which incorporates both continuous and discrete times, namely time as an arbitrary set of reals called time scales. In this paper, we develop and investigate qualitative properties of hybrid dynamic systems on time scales utilizing Lyapunov like functions and comparison principle. (Received September 28, 2000)