

**Meeting:** 1003, Atlanta, Georgia, SS 12A, AMS-SIAM Special Session on Stochastic, Large-Scale, and Hybrid Systems, I

1003-93-656      **Lianwen Wang\*** (lwang@cmsu1.cmsu.edu), Department of Math and Computer Science, Central Missouri State University, Warrensburg, MO 64093. *On approximate controllability for delayed integrodifferential control systems.*

Controllability is an important and interesting topic in control theory. It is the basis of optimal control theory. Generally, control systems governed by parabolic partial differential equations are not exact controllable, and we discuss approximate controllability for these control systems. In this paper we focus on the approximate controllability for a class of control systems described by nonlinear delayed integrodifferential equations in Banach spaces. We prove that under some natural assumptions the systems are approximately controllable if the corresponding linear counterparts are approximately controllable. (Received September 26, 2004)