1046-49-689   **Alec N. Kercheval*** (`kercheva@math.fsu.edu`), Department of Mathematics, 1017 Academic Way, Room 208, Florida State University, Tallahassee, FL 32306-4510, and **Juan F. Moreno**.
Optimal impulse control in currency markets when interventions affect rates.

We address the problem of optimal Central Bank intervention in the exchange rate market when interventions create feedback in the rate dynamics. In particular, we extend the work done on optimal impulse control by Cadenillas and Zapatero (1999, 2000) to incorporate temporary market reactions to Bank interventions. The duration and level of these reactions can be random. We obtain new explicit optimal impulse control strategies that account for these market reactions. (Received September 10, 2008)