Applied Dynamical Systems Seminar

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3:00p.m., HH-3017

The Equilibria of TCP/RED model implemented by a new scheme of dynamic routing

Abstract:

Current dynamic routing algorithm is criticized due to the oscillation induced by such routing scheme. In the present work, we implement the TCP/RED algorithm by a new scheme of dynamic routing, based on the measurement of rate of occupancy of different links, which only requires the information of the queue size at the buffer of the router, to stabilize the system. We classify several types of equilibrium and employ the numerical method to study the stability of the steady state. Our numerical results show that the careful selection of the parameters characterizing the dynamics routing algorithm can stabilize the system for some cases.

Coffee and cookies will be served.

Seminar website: http://www.math.mun.ca/~shuz/seminars.html

----------All are welcome----------