McMaster University   University of Toronto   University of Waterloo

THE FIELDS INSTITUTE FOR RESEARCH IN MATHEMATICAL SCIENCES

DIRECTOR'S SEMINAR

SPEAKER:

SUE ANN CAMPBELL
Center de Recherches Mathematiques
Université de Montréal

On the Topic:

"Multiply Delayed Ordinary Differential Equations as Models for Physiological Control Systems"

Many physiological systems are controlled by delayed feedback mechanisms where the delays correspond to transmission times or processing or reaction delays. In considering systems with multiple control loops, and hence multiple delays, an important question is how the different loops interact (e.g. whether the delays work in parallel or series). By considering some models from the literature, we will show how the structure of the systems can drastically effect the complexity of solutions observed. In particular, the (non)existence of irregular behaviour will be considered.

Monday, March 15, 1993

4:00 pm, room 3018

at

The Fields Institute

Refreshments at 3:00 pm, Common Room