



Seminar

Systems and Control Group - CIDMA

17 de junho de 2019, 14h00

Departamento de Matemática, Universidade de Aveiro
Sala Sousa Pinto

Local and global dynamics of Ramsey model: from
continuous to discrete time

Malgorzata K. Guzowska

Institute of Econometrics and Statistics, University of Szczecin, Poland
malgorzata.guzowska@usz.edu.pl

Abstract

The choice of time as a discrete or continuous variable may radically affect the stability of equilibrium in an endogenous growth model with durable consumption. In the continuous-time model the steady state is locally saddle-path stable with monotonic convergence. However, in the discrete-time model the steady state may be unstable or saddle-path stable with monotonic or oscillatory convergence.

In this paper, we study general polynomial discretization in backward and forward looking, and the preservation of stability properties. We apply these results to the Ramsey model. Finally, in this paper, we study the local and global dynamics of a new discrete Ramsey model.

References

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