

UNICAMP – IMECC  
Departamento de Matemática

## Seminário de Sistemas Dinâmicos e Estocásticos

**Expositor:** M. A. Diniz (UFSCAR)

**Título:** Entropy of money distribution

**Data:** Sexta-feira, 6 de agosto de 2010, 13h30min

**Local:** Sala 321 do IMECC

**Resumo.** Since the work of Dragulescu and Yakovenko (2000) several papers have approached the income distribution problem from the econophysics point of view. However, these works usually do not assume the existence of a “government” agent, that is to say, some agent that collects taxes from the other agents and periodically gives this amount back to them in the form of goods and services.

Our main goal is to study the effect of different taxation schemes on the income distribution considering the Dragulescu-Yakovenko framework. We adopt their framework and after discussing its main results we evaluate, through simulated data, how the entropy of money distribution evolves in time assuming different taxation schemes. We also focus on inequality measures such as the Gini and Theil indexes. Eventually we compare the taxation schemes based on these measures.

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