

# Is the market really a minority game?

*Fernando F. Ferreira, Matteo Marsili*

*The Abdus Salam International Centre for Theoretical Physics,  
Strada Costiera 11, Trieste Italy 34015*

## Abstract

$\$$ -Game was recently introduced as an extension of the Minority Game. In this paper we compare this model with the well know Minority Game and the Majority Game models. Due to the inter-temporal nature of the market payoff, we introduce a two step transaction with single and mixed group of interacting traders. When the population is composed of two different group of  $\$$ -traders, they show an anti-imitative behavior. However, when they interact with minority or majority players the  $\$$ -population imitates the usual behavior of these players. Finally we discuss how these models contribute to clarify the market mechanism.