

**TT1 - Marat Rafikov (UNIJUI, RS - Brazil)**

***Mathematical Modelling and Optimal Pest Control***

Saturday, Sunday – 09:00-10:20

Portuguese

**Abstract:**

**Saturday**

**We will consider the following mathematical models of populations: Malthus model, Verhulst model, Lotka – Volterra model, Kolmogorov Model and two preys one predator Lotka-Volterra model. We will discuss the possibility of applications of these models for determination of the optimal pest control strategies.**

**Sunday**

**We will consider the following topics. Biological pest control. Natural Enemies. Simulations of the Pest Control Strategies. Optimal Pest Control by the Natural Enemies Introduction. Mathematical Modeling and Control of the Soybean Caterpillar.**