

**Meeting:** 1002, Pittsburgh, Pennsylvania, SS 13A, Special Session on Mathematical Biology

1002-34-24            **Tolibjon E. Buriyev\*** (tolibjonb@yahoo.com), 11/2 Shota Rustaveli str., Samarkand, Samarkand, 703034, and **Vafokul Ergashevich Ergashev** (vafokul@rambler.ru), 15, University Blvd., Samarkand, 703004 Samarkand, Uzbekistan. *Chaos and Self-Oscillatory Regimes in Ecological System of two Competing Prey and One Predator.*

The presented work is a prolongation of a series of studies dedicated to qualitatively -numerical research of models of dynamics of three populations interacting by predator-prey principle. The purpose of present work is to investigate model of dynamics of community consisting of two competing prey and one predator ,taking into account with saturation affect in predator populations. We show the existence of Stable Self-Oscillatory regimes of behaviour in system and studies its bifurcations. The investigations has been carried out qualitatively based on the bifurcation theory of systems of ordinary differential equations also by means of a computer experiments. (Received July 12, 2004)