

Prof. Muhammet Kurulay

Yildiz Technical University

Department of Mathematical Engineering

Yıldız, 34349 Beşiktaş/Istanbul, Turkey, Tél: +90 505 369 4739

mkurulay@yildiz.edu.tr muhammetkurulay@gmail.com

One talk in Bioengineering**Title:**

A dynamic model describing of the interaction of virus in cancer patients

Abstract:

We present a phase-space analysis of a mathematical model of tumor growth with interaction virus and immune responses. Here, all the endemic equilibrium points related models are derived. We study, the stability behavior and domain of the attraction sets of the nonlinear systems concerning this model. Further, the global stability analysis either, at disease-free equilibria, and at endemic equilibria are discussed by constructing a Lyapunov function which shows the validity of the concern model exists.