# CANCER AND MATHEMATICS

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**Abstract** - The talk will be concerned with mathematical models of cancer chemo or immune therapy. I have defined mathematical models of cancer growth and chemo or immune therapy. A three dimensional discrete dynamical system, i. e. a map, and an ordinary differential equations model in variables cancer, growth factors and growth inhibitors. So there is cancer and positive control and negative control. These mathematical models can predict how to give chemo or immune therapy optimally. See [1], [9] and [12] below. There is an induced dynamical system, that describes the cancer growth with the optimal chemo or immune therapy. If time permits I shall explain fundamental mathematical concepts of dynamics applicable to problems in medicine and biology, see also [6].

**Keywords** - Mathematical Model, Cancer, Immune Therapy, Dynamical System, Chaos, Periodic Orbit.