Numerical Methods for Mathematical Models of Cancer Dynamics

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In recent years, mathematical models have been playing an increasing role in cancer studies. The underlying complexity of the biological processes requires researchers to use mathematical models of different types, including discrete and continuous models, deterministic and stochastic models, and models with time delays. In this series of talks we will overview a selection of methods that are being used in the discipline. We will discuss numerical methods for delayed differential equations, numerical methods for nonlinear time-dependent PDEs, and techniques that can be used on the interface between discrete and continuum models.