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Modelling Complex Multicellular Tumour-Immune Systems

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The report develops a variety of mathematical tools to model the dynamics of large systems of interacting cells. Interactions are ruled not only by laws of classical mechanics but also by some biological functions. The mathematical approach is the one of kinetic theory and non-equilibrium statistical mechanics.

Keywords: Cancer modelling, Multiscale modelling, Complexity in biology, Living system, Kinetic theory, Multicellular system, Asymptotic limit.