Asymptotic Preserving Scheme from Kinetic to Macroscopic Scale for Multicellular Growing Systems

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In this work, we develop a numerical method to solve a model for Kinetic Theory of Active Particles (in brief KTAP) which is able to capture a macroscopic models of biological system of two populations cells.

The asymptotic preserving (AP) schemes are based on the micro/macro decomposition technique, which applies to general collision operators.

We also present several numerical tests to illustrate the efficiency of our approach.

References


