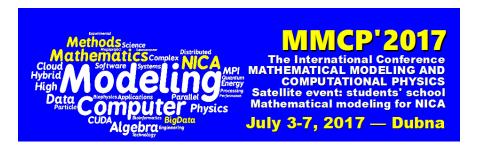
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Investigation of the entropy of a system of many particles with gravitational interaction

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This paper is devoted to the study of entropy of a system of many particles with gravitational interaction. The study of entropy behavior is based on the Vlasov kinetic equation, using both numerical and exact solution. In view of the special laboriousness of the computation, parallel algorithms using CUDA technology are implemented in this paper. A parallel algorithm for solving the Vlasov equation by the particle method is presented. The time dependence of entropy is obtained, its analysis is carried out.

Short biography note

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