Vlasiator: Latest results

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Vlasiator is a newly developed, global hybrid-Vlasov simulation, which solves the six-dimensional phase space utilising the Vlasov equation for protons, while electrons are a charge-neutralising fluid. The outcome of the simulation is a global reproduction of ion-scale physics. Vlasiator produces the ion distribution functions and the related kinetic physics in unprecedented detail, in the global scale magnetospheric scale with the resolution required by ion kinetic physics. Here, we review the recent progress in Vlasiator both in terms of development and physics. This poster is adjacent to a talk reviewing Vlasiator strategy and future prospects.

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