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A new transport approach for heavy ion collisions

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I present a new transport approach for heavy ion collisions based on a n-body transport theory and called PHQMD. In contradistinction to all other approaches it allows to study the production of fragments as well as of hypernuclei in the energy range from $E_{Lab} = 500$ AMeV to $\sqrt{s} = 13$ TeV. First tests show that indeed fragments are produced at all energies (as seen experimentally) and that the new approach reproduces almost all the fragmentation data which are available right now. All so the multiplicity and spectra of the produced mesons and baryons are well reproduced.

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