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## Effects of Induced Surface Tension in Nuclear and Hadron Matter

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Short range particle repulsion is rather important property of the hadronic and nuclear matter equations of state. I present a novel equation of state which is based on the virial expansion for the multicomponent mixtures with hard core repulsion.

The suggested equation of state explicitly contains the surface tension which is induced by particle interaction. At high densities such a surface tension vanishes and in this way it switches the excluded volume treatment of hard core repulsion to its proper volume treatment. I discuss possible applications of this equation of state to a description of hadronic multiplicities measured in A+A collisions, to an investigation of the nuclear matter phase diagram properties and to the neutron star interior modeling.

### Summary

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