

Abstract Submitted
for the MAR10 Meeting of
The American Physical Society

The basic properties of the fractional exclusion statistics

DRAGOS-VICTOR ANGHEL, National Institute of Physics and Nuclear Engineering — I derive the general conditions that have to be satisfied by the fractional exclusion statistics (FES) parameters in any (macroscopic) FES system. These conditions are obtained using a very simple and intuitive model and define how the FES parameters change at the redefinitions of the particle species in the system. Further, I introduce an ansatz for the FES parameters, which satisfies the general conditions. I check the ansatz for a few well-known models of interacting particle systems, and I calculate the thermodynamics of systems described by these models.

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Date submitted: 20 Nov 2009

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