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Collapsing stage of "bosonic matter"

E.B. Manoukian^{a,*}, C. Muthaporn^b, S. Sirininlakul^a

^a School of Physics, Institute of Science, Suranaree University of Technology, Nakhon Ratchasima 30000, Thailand ^b Department of Physics, Faculty of Science, Khon Kaen University, Khon Kaen 40002, Thailand

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Abstract

We prove rigorously that for "bosonic matter", if deflation occurs upon collapse as more and more such matter is put together, then for a nonvanishing probability of having the negatively charged particles, with Coulomb interactions, within a sphere of radius R, the latter *necessarily* cannot decrease faster than $N^{-1/3}$ for large N, where N denotes the number of the negatively charged particles. This is in clear distinction with matter (i.e., matter with the exclusion principle) which inflates and R necessarily increases not any slower than $N^{1/3}$ for large N. © 2005 Elsevier B.V. All rights reserved.

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