Abstract Submitted for the MAS14 Meeting of The American Physical Society

Introduction to the Neutrosophic Statistical Mechanics FLO-RENTIN SMARANDACHE, Univ of New Mexico — Neutrosophic Statistical Mechanics is the theory in which, using the neutrosophic statistical behavior of the constituent particles of a macroscopic system, are predicted the approximate properties of this macroscopic system. Neutrosophic Statistics means statistical analysis of population or sample that has indeterminate (imprecise, ambiguous, vague, incomplete, unknown) data. For example, the population or sample size might not be exactly determinate because of some individuals that partially belong to the population or sample, and partially they do not belong, or individuals whose appurtenance is completely unknown. Also, there are population or sample individuals whose data could be indeterminate. (Depending on the type of indeterminacy one can define various types of neutrosophic statistics.) The neutrosophic value of the average energy of one system, for a given period of time, is close to the neutrosophic average instantaneous value of this energy over a large number of systems. Therefore, in principle if one knows the neutrosophic energy levels of its components, one obtains the approximate thermodynamic properties of the system.

> Florentin Smarandache Univ of New Mexico

Date submitted: 19 Jun 2014

Electronic form version 1.4