

Virus-DNA-Like Nuclear Model

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Abstract. The Virus has a cycle DNA (no beginning and no end like the human DNA). Different molecular models of the nuclei didn't consider this option. On the basis of saturation of nuclear forces, we suggest a new model of nucleus, of nuclear field, nuclear forces, based on the "one dimensional" nuclear volume, the nuclear tube. In the fusion (when new nuclear matter are formed) the nucleons do not fall in the mean field, they rather form a chain and their representation is a soliton one. These solitons respect the "shell model" constraints, filling up the shells of energy. All the nucleons are related to their pair solitons waves. We addressed the question of quark involvements in this game and some hints come from the binding energy of nucleon in the nucleus reported to the number of valence quarks.