

Abstract Submitted  
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**Communication and Process of a Package of Information (CPPI) by the Fundamental Particle (String) in a Planck Time as the "Fundamental Physical Constant" in Nature** HASSAN GHOLIBEIGIAN<sup>1</sup>, No Company Provided — Fundamental particle (string) needs a package of information including quantum information of its exact position and law for motion to its next step, which is a Planck length or going to the next situation which is occurred in a Planck time. On the other hand, this process is including two stages as follows: 1- communication of information via its sub-particles (substrings) from dimension of information which can as the "fundamental Symmetry" in the nature, 2- processing the information (a symmetry in nature), while it is interacting with its neighbors, and moves to its next situation. So, it is necessary that a package of information be near each of fundamental particle. In other words, dimension of information including new packages is nested with space-time, and its densities in its different locations are matched on correspondence densities in space-time. So, black hole's location including most density of packages in nature. My proposed formula for number of packages of information ( $I$ ) is:  $I = t_P^{-1} \cdot \tau$  in which  $t_P$  is Planck time and  $\tau$  is lifetime of fundamental particle (string) per second. Therefore, I propose CPPI as a "fundamental physical constant" in nature.

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