

Abstract Submitted  
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**The mass, energy, space and time systemic theory- MEST- The new space-time equation** DAYONG CAO, Beijing Natural Providence Science & Technology Development Co., Ltd — The space-time is produced by motion. The displacement and period of the orbit of the motion are the macro space-time; the probability of them of wave are the quantum space-time. In solar system, there is a mass-energy center which is a origin of a space-time coordinate system. There is a gravitational field of mass-energy around sun. The gravitational field can direct the orbit of space-time of motion. And there is a binding energy of the mass-energy center; in black hole system, there is a space-time center which is a origin of a mass-energy coordinate system. There is a “gravitational field” of space-time around black hole. And there is a binding energy of the space-time center. There is a balance energy equation between sun and black hole. According to the quantum mechanics,

$$E'\psi = i\hbar \frac{\partial\psi}{\partial t} \quad (1)$$

$$m'\psi = -i\hbar \frac{\partial\psi\partial t}{(\partial x)^2} \quad (2)$$

$$h\nu + E'\psi = mc^2 + m'\psi c'^2, (c'^2 = -\frac{(\partial x)^2}{(\partial t)^2}) \quad (3)$$

Among it,  $E'\psi$ : the energy of dark wave of black hole,  $m'\psi$ : the mass of dark wave,  $c'$ : the velocity of dark wave,  $\psi$ : the Wave Functions.

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