The mass, energy, space and time systemic theory-MEST-energy balance system of wave-particle duality DAYONG CAO, Beijing Natural Providence Science & Technology Development Co., Ltd — The paper suppose that the probability of displacement is the space and the probability of cycle is the time. And accroding to the quantum mechanics, the paper get the equation of the space : $S = P(r) = f^2$, (1) Among it, S: the space, f: the amplitude of wave, r: the displacement, P(r): probability function of displacement. Accroding to the Benford's law, the paper get the equation of the time equation: $T = P(2\pi t) = ln(1 + \frac{1}{2\pi t}) = \nu$, (2) Among it, T: the real time, t: date of clock, ν: the frequence of wave, P(t): probability function of date of the clock. $E = h\nu$, (3) $m = \frac{h}{\lambda c}$, (4) Among it, E: the energy of particle, m: the mass of particle, c: the velocity of particle, ν: the frequence of particle, λ: the wavelengh, h: the Planck constant. $E'\psi = i\hbar\frac{\partial\psi}{\partial t}$, (5) $m'\psi = -i\hbar\frac{\partial\psi\partial t}{(\partial x)^2}$, (6) Among it, $E'\psi$: the energy of wave, $m'\psi$: the mass of wave, c': the velocity of wave, ψ: the Wave Functions. The paper give new idea that unlike mass repel each other, like mass attract; And like energy repel each other, unlike energy attract. So there is a mass-energy duality too. The energy radiate the repulsive (energy) wave and the mass absorb the absorptive (mass) wave. And there is a balance system between the energy wave and mass wave. $E + E'\psi = mc^2 + m'\psi c'^2, (c'^2 = -\frac{(\partial x)^2}{(\partial t)^2})$, (7)

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