[Math.9] and this one are the calculation formulae under the condition of no gravity. But, we need to attain the equation which is applicable to this world. Thus, the calculation is to be done assuming g=velocity of the substance／velocity of light in the following. But, as light travels over a long distance and eventually loses energy it retains to finally disappear, in fact, though light does keep its velocity fixed for quite a long period of time, the velocity of light which also diminishes over its long period of duration until its disappearance must be reflected in this calculation.

[Math.12]

$$E=\sum_{K=1}^{t} m_K v_K \times 1/g \quad (1 \leqq K \leqq t)$$
$$=\sum_{K=1}^{t} m_K v_K \times c_K / v_K$$
$$=\sum_{x=1}^{t} m_1 \left(1-t_x/t\right) \times c_1 \left(1-t_x/t\right)$$
$$=\sum_{x=1}^{t} m_1 c_1 \left(1-t_x/t\right)^2$$
$$=\sum_{K=1}^{t} m_1 c_1 \left(1-t_K/t\right)^2$$

At this point, the impact of gravity on time also needs to be reflected. Thereby, the formula above would be ;

$$E=\sum_{K=1}^{T} m_1 c_1 \left(1-T_K/T\right)^2 \qquad T=t\times 1/g \quad (1 \leqq K \leqq T)$$

[0014]

Now, on the other hand, in the formula, energy=mass × velocity of light ×

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