Equivalence of Energy and Time

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Abstract
A formula is developed that shows the equivalence of energy and time.

Keywords: Energy, time, PLANCK time, PLANCK quantum of action

Derivation of a formula that describes the equivalence of energy and time

In the International Journal of Physics and Astronomy, June 2019, Vol.7, No.1, pp 1-7
[1] a formula for calculation dark energy was developed under the title „Calculation of Dark Energy and Dark Matter“. It is:

$$E_d = h\, t_u / t_p^2$$

This formula is now expanded below to

$$E = (h/tp2) \cdot t$$

Starting from

$$E = h/t$$

is obtained by substituting tp for t

$$Ep = h/t_p$$

for the energy in the PLANCK time.

For the energy per one second we get:

$$E_1 = h/t_p^2$$

and for energy in time t

$$E = (h/t_p^2) \cdot t$$

This is the general formula for the equivalence of energy and time.

If you use age of the universe for the time t, you get the amount of dark energy.

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Definition of symbols used in formulars

E = energy
E_d = Dark energy
t = time
t_u = age of the universe
t_p = PLANCK time
h = PLANCK quantum action

References

[1] JÖGE, F.: Calculation of Dark Energy and Dark Matter,International journal of Physics and Astronomy, June 2019, Vol.7, No.1, pp 1-7
http://doi.org/1015640/ijpa.V7n1a1

[2] KINSEHER RICHARD: Das Wesen von Zeit ist Energie, Verlag Books on DemandGmbH 2016 Norderstedt, ISBN-13: 9783741220722