## Abstract Submitted for the APR18 Meeting of The American Physical Society

New Einstein Field Equation Explains of Dark Matter and Dark Energy DAYONG CAO, Avoid Earth Extinction Association — In Einstein's equation,

$$G_{ik} = R_{ik} - \frac{1}{2}g_{ik}R = \kappa T_{ik} \tag{1}$$

With a coordinates system of spacetime and mass(energy) center, left side of the equation is structure of massenergy field, right side of the equation is massenergy field. The equation is gravitational structure. Contract equation (1) with

$$g^{ik}$$
 (2)

$$R = -\kappa T_k^k \tag{3}$$

Substituting (3) to (1), Getting other Einstein's Equation,

$$G'_{ik} = T_{ik} - \frac{1}{2}g_{ik}T_k^k = \frac{1}{\kappa}R_{ik} \tag{4}$$

With a coordinates system of massenergy and spacetime center, left side of the equation is structure of spacetime field, right side of the equation is spacetime field. The equation is negative gravitational structure. The equation (4) can explain of dark matter and dark energy. We also suppose the moon has a relationship with dark matter and dark energy.

$$G_{ik} + G'_{ik} = 0 (5)$$

The equation (5) can explain of flat structure of the universe. http://meetings.aps.org/Meeting/APR16/Session/M13.8

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