

Equation of macroscopical nonlocality relates the entropy production in the probe process \dot{S} with density of the entropy production in the environment \dot{s} :

$$\dot{S} = \sigma \int \frac{\dot{s}}{r^2} \delta\left(t^2 - \frac{r^2}{v^2}\right) dV,$$

where r is distance, t is time, $v^2 \leq c^2$, integral takes over infinite volume, σ is cross-section of transaction:

$$\sigma \approx \frac{e^4}{m_e^2 c_2^4},$$

where m_e is mass of electron, c_2 is course of time. In the classical limit $c_2 \rightarrow \infty$, and phenomenon of nonlocality vanishes. δ -function shows, that nonlocal transaction occurs with two lags - with retarded one and symmetrical advanced one.

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