WHAT DOES THE NUCLEAR CHRONOMETRY SAY ON REAL AGE OF STARS AND EARTH?

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S u m m a r y

We consider the factors which essentially influence the results of measurements of the effective duration of decomposition of a large massif of matter containing long-living radioactive chronometric nuclei that still have not been taken into consideration. For the first time, the contribution of alpha-particles' knocking out into the reduction of the half-life period of chronometric nuclei at the Earth's surface is considered for specific models of interaction between cosmic protons and chronometric nuclei. The results obtained give an evidence for that the Earth's age may be less by several orders of magnitude as compared with the previous estimations.