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The extra-high energy cosmic rays and the new seismology

Abstract content

The extra-high energy (above 10^{17} eV) extensive air showers may be used as a trigger for registration of the acoustic signals from the seismically active medium. This possibility is due to creation of the microscopic seed fissures by energetic muons deeply in the Earth (tens of kilometers). If some seismic tension is present in the medium, the fissures start to quickly develop, emission of acoustic waves being a result of this process. Intensity of the acoustic signal increases rapidly with the closeness of the medium to a critical state where an earthquake may be possible.

Studies of the new prognosis method of the earthquakes is supposed to be held at the Tien-Shan experimental complex ATHLET which is placed in the seismically active region in vicinity of Almaty city.

If this papers is presented for a collaboration, please specify the collaboration

Summary

Reference

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