

# **On the heliosphere structure's changes in the Apex and its role on the short period variations of GCR**

T. B. Botchorishvili (1), **L. I. Dorman** (2)

(1) Institute of Computer Science, University of Podlasie, Siedlce 08-110, Poland,

(2) Cosmic Ray & Space Weather Center and Emilio Segre' Observatory, Tel Aviv University, TECHNION, and Israel Space Agency, Israel

(tengo@ap.siedlce.pl / Phone: +48-25-6431167)

In our previous article we spoke about asymmetrical form of the heliosphere and we denoted that the deformation of the heliospheric form is one of the causes of GCR annual variations. In next papers it was shown, that when the Earth brings nearer the Apex during its voyager around the Sun, the mean number of sunspots increase and GCR intensity decreases. In this paper we assume that the increasing of the number of sunspots near of the Apex induces an amplification of the global magnetic field of the Sun in this direction and also the additional change of the inhomogeneities structures.

In this paper we present the model of the asymmetrical heliosphere with amplified magnetic field in the Apex direction.