Heliolatitudinal component B_θ of the interplanetary magnetic field and modulation of galactic cosmic rays

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Measurements on the Ulysses has revealed that the solar wind velocity is approximately constant $\approx$ 400-450 km/s in the low heliolatitudes ($\pm$ 0-35^0) and then it is doubled up to $\approx$ 800 km/s in the middle and high latitudes in the minima epoch of solar activity. These specific heliolatitudinal changes of the solar wind velocity cause the violence of the equilibrium between the neighboring located regions with different solar wind velocities. According to Daniel Bernoulli's principle as the speed of a moving fluid within the fluid tube increases, the static pressure P_{static}within the fluid tube decreases and the dynamic pressure $P_{dynamic}$ increases. So, it follows that the static pressure in the neighboring layer is higher and the solar wind plasma with frozen in interplanetary magnetic field (IMF) lines from lower speed region will be involved by the high speed region. So, the IMF lines from the lower velocity region will shift to the direction of the high solar wind velocity region. Therefore, the diverged lines of the IMF from the heliolatitudes (including the helioequatorial region) should be a reason of the appearance of the IMF's latitudinal component B_θ. An existence of the B_θ component of the IMF plays an important role in the peculiarities of the modulation of galactic cosmic rays in the three dimensional heliosphere. First of all, a transformation of the anisotropic diffusion tensor of galactic cosmic rays for the three dimensional IMF is necessary for the modeling of galactic cosmic propagation in the heliosphere.