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On some basic principles of the wave planetology illustrated by real shapes and tectonic patterns of celestial bodies.
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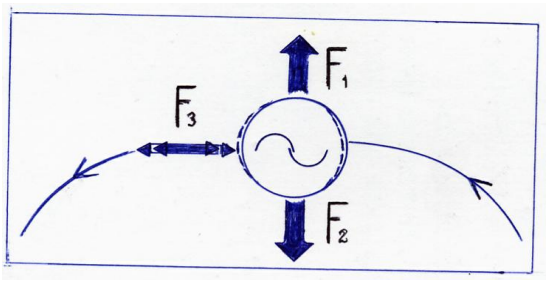
The physical background. Celestial bodies move in orbits and keep them due to equality of centrifugal and attraction forces. These forces are oppositely directed. There is a third force –the inertia-gravity one directed at the right angle to mentioned above and, thus, not interfering with them (Fig. 1). This force is caused by moving all celestial bodies in non-circular keplerian orbits with periodically changing accelerations. A clear illustration of status of this third force is a stretched rope never achieving a straight line because of the not compensated rope weight acting at the right angle to the stretching forces. In the case of cosmic bodies this "not compensated" inertia-gravity force is absorbed in a cosmic body mass making this mass to warp, undulate. This warping in form of standing waves in rotating bodies is decomposed in four interfering directions (ortho- and diagonal) (Fig. 2) producing uplifted (+, ++), subsided (-, --) and neutral (0) blocks (Fig. 2).

An interference of fundamental waves 1 long $2\pi R$ makes always present in bodies tectonic dichotomy: an opposition of two hemispheres-segments – one uplifted, another subsided (Fig. 2-6). The first overtone of the wave 1 – wave 2 long πR makes tectonic sectors superimposed on segments-hemispheres (Fig. 2, 7, 8). Along with the segment-sectoral pattern in cosmic bodies tectonic granulation develops (Fig. 9, 10). The granule sizes are inversely proportional to orbital frequencies [1-3].



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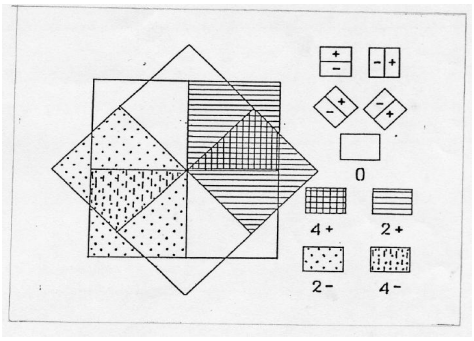

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Fig. 1. Forces acting on a moving body: F1-centrifugal, F2-central body attraction, F3-inertia-gravity.
Fig. 2. Flat geometric model of four waves interference. Segmentation (dichotomy) and sectoring. One needs mentally to wrap up it around a globe.

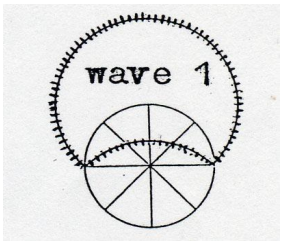

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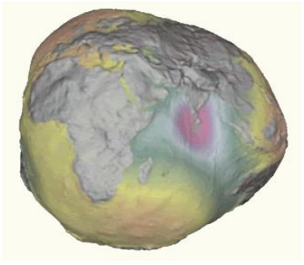
Fig. 3. Fundamental wave warping a globe and making dichotomy.
Fig. 4. Dichotomy of Deimos. PIA 11826.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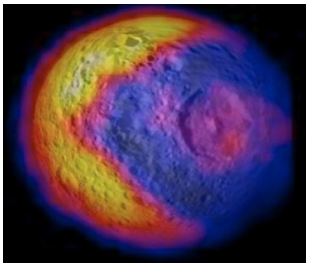
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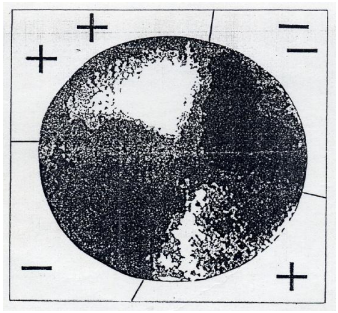
Fig. 5. Exaggerated Earth's geoid nearing a tetrahedron. Abb0dc5376d8.jpg
Fig. 6. Mimas, PIA12867. Dichotomy of surface temperature distribution.



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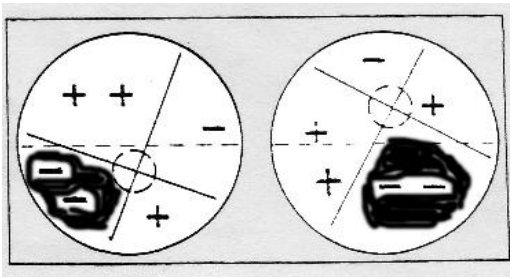

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Fig. 7. Sectoral structure of Mars. Image of intensity ratio of two wavelengths (1.02/0.73 microns). White – high ratio characteristic for uplifted areas (+), black – low ratio of subsided areas (-) [4].
Fig. 8. Schemes of different levels (+, ++, -, --) tectonic sectors on continental segments-hemispheres of the Moon (left) and Earth. The sectors are grouped around the Mare Orientale and the Pamirs-Hindukush mountain massif. Black – the most subsided sectors: SPA basin and Indian geoid minimum.

The sectoral tectonic blocks are clearly visible also on Venus and icy satellites of Saturn, especially on polar views. Earth and photosphere are remarkable reference points of this fundamental dependence: orbits – tectonic granulation (Fig. 9, 10).

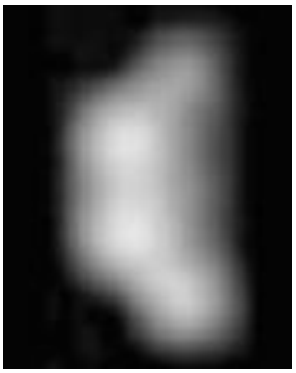

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Fig. 9. Earth from a distance of 1,17 mln. km. PIA04159 (NASA' Mars Recon. Orbiter mission).Granule size $\pi R/4$.
Fig. 10. Sun's photosphere supergranulation (supergranule size $\pi R/48$-60)

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