

**I take out my interpretation from the discussions (inserted in red in V.Ullmann's text)**

**deddek** opposition thinking makes sense smysl [Kosmologie, astrofyzika, HDV](#)  
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Cosmology, astrophysics, HDV  
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Ullmann Vojtěch is very close to HDV, he writes about the multidimensionality of space-time here : <http://astronuklfyzika.sweb.cz/GravitaceB-6.htm> Unfortunately, Ullmann is not yet clear, but he already distinguishes the "flatness" of the 3 + 1 large-scale Universe (ie small curvatures, local, caused by gravity... OTR) and distinguishes the "flatness" in the micro universe, ie the coiling of higher dimensions in the microworld. I'm already talking about "foam of curved dimensions, boiling vacuum n + m of dimensional... .where it is born = elementary particles are recruited not only from" flat developed dimensions "but also from coiled-twisted ones - see Ullmann's words.

"Geometric approach" :

Simple array in complex space, alternative approach introduces (...) The most common such generalization of geometric properties of space consists in introducing other dimensions - "extra-dimensions" \*) - of space. These are multidimensional unitary theories. \*)  
Compactification of extra-dimensions. The basic objection to the existence of these other dimensions is that no observations or experiments have ever been observed. **Yes, the objection is still alive, see string theories. And see the constant objections to my HDV.** This objection is solved by the concept of the **so-called compacting of wave wrapping, balling of the relevant dimensions** - in the direction of these dimensions the space is topologically "rolled", "twisted" or "rolled up" into a circular shape. **Dimensional balls, wave packages from the basic 3 + 3D dimensions cp which "twists" topologically, which then manifests itself as an "extra-higher dimension" over the basic number of 3 + 3D so small in length that no macroscopic (or even existing microscopic) methods are we cannot observe or detect, it would mean that leptons, quarks would have to be "examined" to see if the "curvature - rolling - twisting of dimensions is demonstrated. interior space of twisted dimensions.**  
In addition to the outer three-dimensional space, preferably in addition to the 3 + 3D developed dimensions that we can observe and which we know from experience, the inner space of twisted dimensions is also hidden in multidimensional theories.  
**I often say that in the basic grid 3 + 3D "states" of higher dimensions "float" = mass elements = wave packs (quarks, leptons) and they are then compacted into "connected" structures = atoms, molecules, compounds..., etc. These inner extra-dimensions. Prof. Ullmann means "new-other" dimensions, but I think they are only the three basic, but already "twisted" curved dimensions crooked in foam space-time...; "Boiling vacuum dimensions" are immanently present at every point in space. yes, in the "vacuum foam" they are not only after Třesk, but still today there is a foam foam around us, virtual pairs are born there, etc. The initial field can then be distributed locally not only in the usual three spatial dimensions, ie OTR but also in the direction of additional internal dimensions. that is, in QM positions Within the quantum theory of the field, local excitation and oscillation of the initial field in the directions of individual internal extra-dimensions, differing in geometric properties (eg symmetries) effectively create different types of elementary particles (virtual or real). Here, Ullmann himself already describes my HDV to 99% - it is just a slightly different verbal description of "production of material elements" from 3 + 3 dimensions of space-time. The properties of the**

fields we observe thus depend on the geometric properties of other, hidden extra-dimensions. This is the "connection" of linear QM with nonlinear OTR... linear "chaotic = foamy" state of cp in the microworld passes by "unpacking" dimensions (fields) into OTR . Different geometries. Topologies, wave-packages, geons... additional dimensions imply different types of particles and forces, This is already at 99% HDV... which in the macroscopic world causes different physical phenomena - the diversity of individual types of interactions.

What to add: Mr. Ullmann and I are already two in this world, what we know from what matter is made by the Universe. - The universe is two-magnitude.

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