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LE DIMENSIONI DELLO SPAZIO
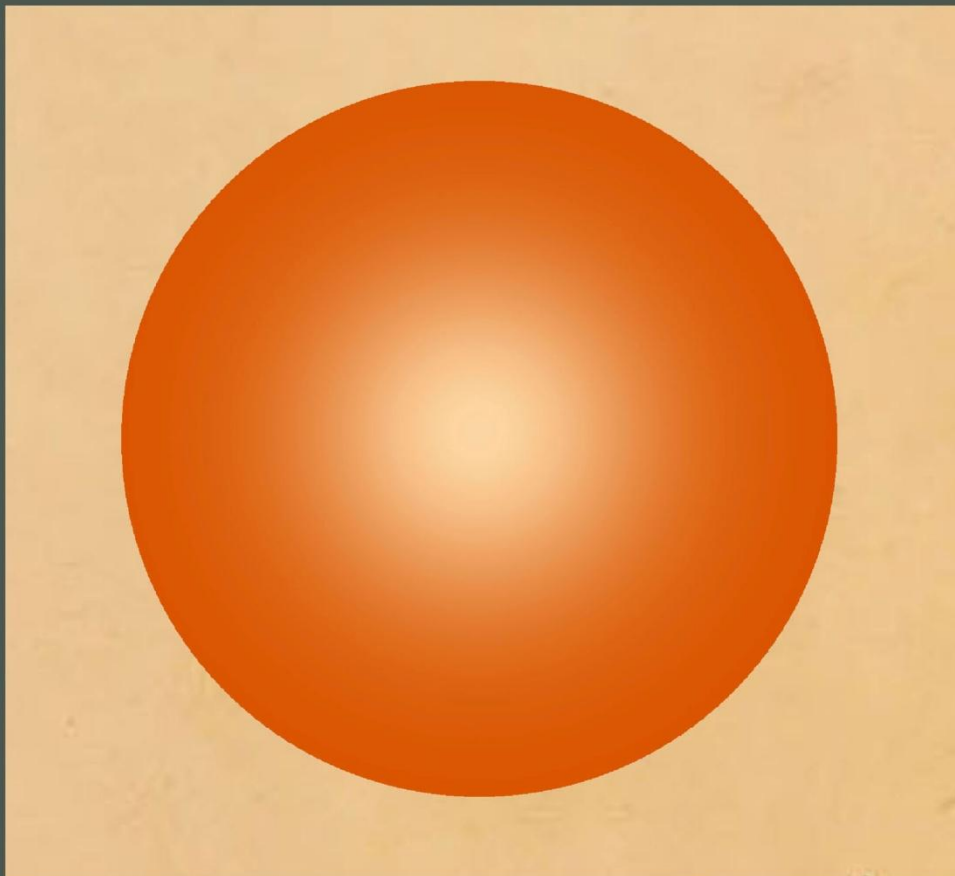
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DIMENSIONS OF THE SPACE

Starting with the principle of continuity of the space, the Author demonstrates the Theorem of the curvature of the space, according to which you can't represent space by means of straight lines or plans but by means of circumferences and spheres.

Any observer doesn't know the curvature of the circumferences and of the spheres that he belongs to.

Then the Author demonstrates the existence of the fourth dimension and that a new dimension corresponds to each new curvature of the space.

In respect of man, as a three-dimensional observer, light, and usually energy transmitted by electromagnetic waves, ranges over the fourth dimension.

We can say that the four dimensions single out energy without corpuscle nature, the three dimensions single out energy with corpuscle nature.

You can't measure in the fourth dimension, but not even in the first three, except short-distance measures, which can be considered exact, by approximating circumferences to straight lines.

From the principle of continuity of the space and from the Theorem of the curvature of the space one can derive that a centre or a border limiting universe do not exist.

The Author first demonstrates the Theorem of finity, according to which each spherical surface divides space in two, in absolute (in the absence of the observer) equivalent half-spaces.