

SACRED GEOMETRY AND ARCHITECTURE



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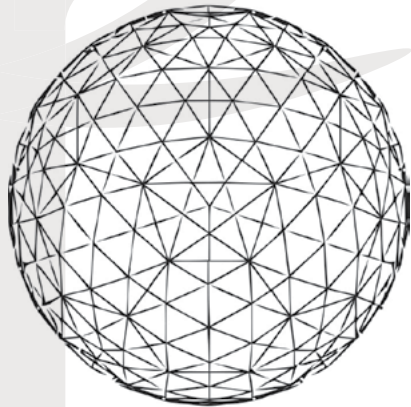
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MICROCOSM AND FRACTAL SCIENCE

3.4- The Gravity of the macrocosm and the Quantum of the microcosm are united

In modern physics, the holographic principle expresses that information is present within certain structures in the Universe such as black/white holes. Holography is the science and technology that allows an image to be captured on a photosensitive surface in such a way that the three-dimensional information of the image is retained and is visible in a similar way as the real object. The difference between a photograph and a hologram is that while in the photograph there is a one-to-one ratio of information at each point of the image in the hologram at each point there is information about the whole image.

This holographic principle in physics implies that the information that crosses the horizon event of a black hole is holographically represented on its surface. Analogously we can think



that on the skin is all the information that a person can capture. The horizon event of a black hole has been found to act as a holographic disk where all the information of its volume can be represented in its surface area. As a result, this holographic principle aptly predicts the entropy or temperature of a black hole and corresponds to a quarter of its surface. In 1975 the mathematician Benoit Mandelbrot coined the term fractal that describes a type of mathematics that resembles the repetitive and intricate patterns found in nature when they are represented visually. Patterns found repetitively on coasts, clouds, leaves, are examples of the underlying geometric order than fractal mathematics.

