



# D-Art

## 2014 Online Gallery

iV

International Conference  
Information Visualisation

CGiV

International Conference  
Computer Graphics Imaging and Visualization

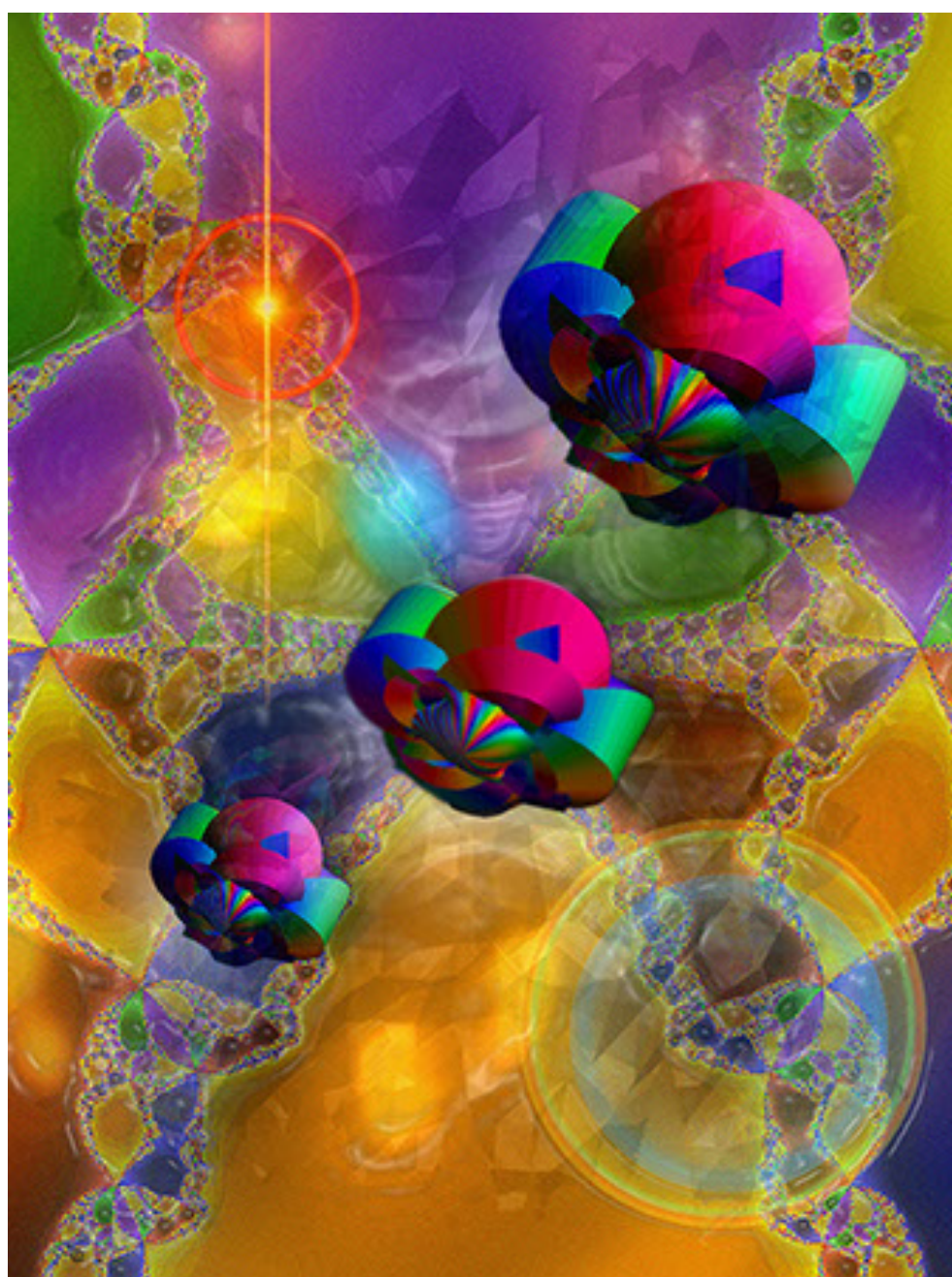
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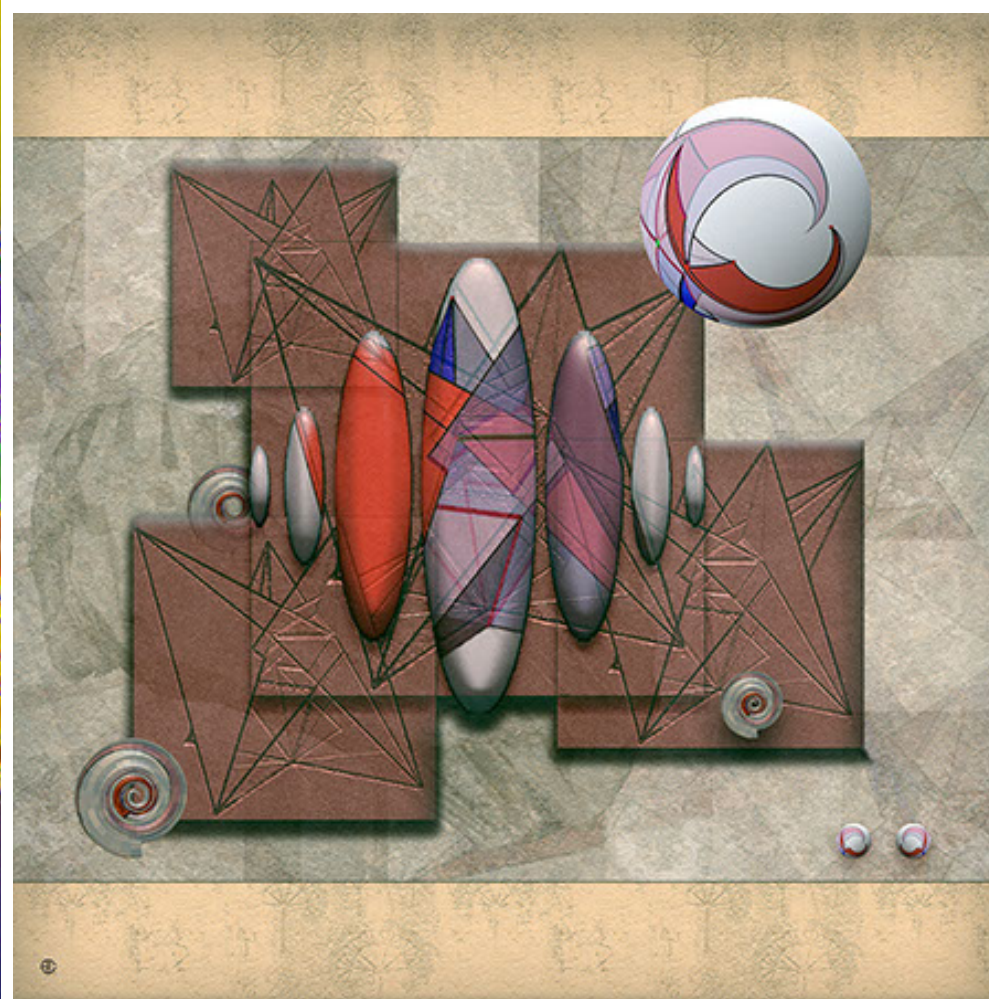
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## Jean Constant



**"Minimal Surface on a Fractal Background"**

**"Minimal Surface on a Fractal Background"**: The term fractal was first used by mathematician Benoit Mandelbrot. The geometric characterization of a fractal is self-similarity as the original shape is made of smaller copies of itself. Fractal patterns can be found in the environment of trees, rivers, and many other forms. Minimal surfaces, on the opposite, are completely self contained objects of a more abstract nature. The fractals were generated in Chaos pro & U&I Software, ArtMatic. The surfaces were composed in 3Dx plorMath.



**"Morin Eversion"**

**"Morin Eversion"**: S. Smale proved that it is mathematically possible to turn a sphere inside-out without introducing a sharp crease at any point. Another eversion was devised by mathematician B. Morin and produced explicit algebraic equations describing the process. During the eversion, the surface must cross through itself transversally. On a given point, the tangent plane must vary continuously. When these conditions are realized, the eversion of the sphere becomes possible. The outlines of the eversion have

dimensional problem in a two dimensional setting.

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