

Masterclass Fractal Trigeometry (MFT)

Content

1. Julius Ruis Set

- Starting with Julia Sets and Mandelbrot Set
- Between zero and infinity
- With orbits (Julius Ruis Set) and without orbits (Julius Set)
- From 2D to 3D Mandelbrot/Julia sets (Fractal Trigeometry)
- Introduction of Juliusbulb en Juliabulb sets

2. Mathematical formulas

- Polynomials
- Transcendental functions
- Inverted functions

3. BBM8.exe as the start of 3D Mandelbrot

- Written in Power Basic
- Some phenomena still to be searched (e.g. disappearing of orbits)
- Relation with Awareness Governance Model (in Dutch: Bewustzijns Besturings Model, BBM)
- Questionnaires BBM and model of Dynamic Transfer
- Integrated Images of Basic, Business and Global Awareness

4. Fractal Imaginator (FI) software

- Source code in possession of Jules Ruis
- FI is for free on internet
- File-extension is .fi data-file, together with the filing of fractal images as .bmp and .jpg files
- 3D fractal images as .obj and .stl files
- Viewing with 3D explorer
- Printing of 3D Juliusbulb and Juliabulb

5. Fractal Science and Art Gallery

- Several images on internet with .fim and .fi-files

6. Patent Application

- Using Fractal Geometry for design and manufacturing of Artificial Human Organs (e.g. Blood Vessels)
- Rapid Prototyping (biodegradable scaffolds)
- Tissue Engineering (direct writing of cells)
- 3D examples (Amitek en TNO)

7. Fractalary: Fractals from Planet to Atoms

- Fractal Design Cycle

8. Fractal Human Organs

- Comparising of real images with fractal images
- Fractal Approach of the Genome (Andras Pellionisz)
- International PostGenetics Society (IPGS)
- Article of Pellionisz with reference to Julius Ruis Set

- Function on membranes (Fractal Evolution)
- 9. Self-assembly of Atoms and Molecules
 - Scientific publications (Bert Meijer)
- 10. Particles and Unparticles
 - Elements as Particle and Wave (quantum mechanics)
 - Scale-invariance of Unparticles
- 11. Bio-nano-robotics
 - Complex Adaptive and Emergent Systems (CAES)
- 12. Universal Fractal Awareness
 - Fractal Trigeometry as the Mathematics of Next Nature
 - In Dutch: www.fractal.org/Fractaal-bewustzijn.pdf

Appendices

- A. Publications
- B. Internet links

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