Hela BEN MAALLEM

Paper: **Using Gumowski-Mira maps for Artistic Creation**

Abstract : The mathematical concept of fractal penetrates not only into numerous scientific fields, but also inspires the artistic creation, in particular the plastic arts. The report of direct or indirect derivation between the number of contemporary creations and the representation of the virtual objects, that are fractals, requires an attentive consideration in order to clarify the issues of the different possible transpositions of the concept, outside its ground area and the aesthetic meaning which it acquires. In this context, we propose some specific views of fractals in the artistic field. We suggest to solve two forms of derivation of "Fractalism": the technical derivation and the aesthetic value. We take as example the study of an Iterated Function System: the Gumowski-Mira model.

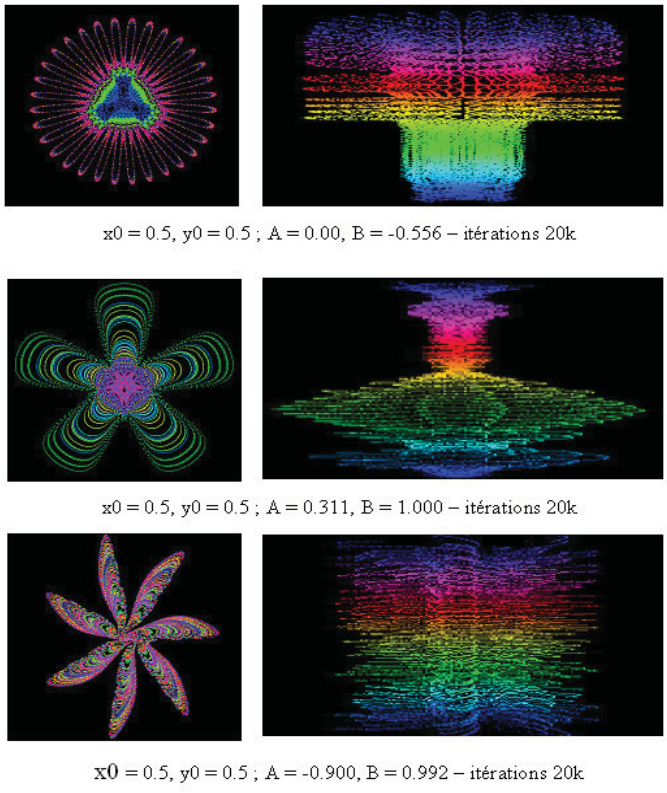

Fig. 1: 2D and 3D visualization of GM maps with color mapping.

Topic: Art

Authors:

Hela Ben Maallem
University of Tunis
Tunisia
University of Angers
France
Paul RICHARD
University of Angers
France
Jean-Louis FERRIER
University of Angers
France www.univ-angers.fr
Abdelaziz LABIB
University of El'Manar
Tunisia

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Contact:
hela@gmx.fr

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