A SOFTWARE FOR VISUALISATION AND ANIMATION IN MATHEMATICS AND PHYSICS

EBERHARD MALKOWSKY

Abstract

We give a short survey of the basic concepts and principles of our own software for geometry and differential geometry and its extensions [4, 1, 2, 3, 5, 6, 7, 8]. Furthermore we deal with some applications our software to the visulisation and animation of certain topics in mathematics and physics such as the illustration of geometric principles in the definition of curves, the study of properties of maps, the graphical representation of some minimal surfaces and of potential surfaces and their Gaussian and mean curvature, the growth of crystals, the study of weak topologies by a collection of functions and p–adic analysis.

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Department of Mathematics, Faculty of Science and Mathematics, University of Niš, Višegradska 33, 18000 Niš, Yugoslavia
E-mail address: ema@Bankerinter.net