Teaching Fractals with Technology

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Abstract. We present our project on teaching fractals with technology and give some examples.

Introduction

Modern technology changes radically the way of teaching natural sciences. Using technology, same course could be taught on different levels of complexity. We present our project on teaching fractals with technology. Fractals are chosen as an example since they are very attractive visually and are encountered in many branches of natural sciences and applications.

Using computer tools (from basic demo software and turtle graphics to CAS and JAVA/Python codes), course with the same topics can be taught on different levels, from primary school to graduate and post-graduate level. It is also possible to present material to students with wide spectrum of age and mathematical background.

We give some examples and discuss our experience of teaching/demonstrating fractals to primary school students and to school teachers.

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