

Generalized fractals, with examples from valuation theory

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By use of iterated function systems, some valuation rings and other parts of certain valued fields can be seen as fractals, and these valued fields themselves can then be seen as “locally fractal”. Using those examples, we will discuss in which ways the classical notion of an attractor of an iterated function system could possibly be generalized to cover more general settings. Further, we ask the question whether “non-archimedean behavior” can in some way be captured in the concept of (generalized) fractals.