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Dimensional Analysis Some recent results and open problems

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Dimensional background of Hilbert's thirteenth problem (Menger's and Noe-beling's dimensionally universal spaces; Sternfeld's characterization of topological dimension by superposition of functions and measures, based on the Theorem of Arnold-Kolmogorov-Ostrand).

Fractalization and chaotization by re-metrization (Zaydler's and Zuehlke's results on the set of paper-folding sequences).

Independency of topological, Hausdorff, and Fourier dimension (Bluhm's construction of sets with pre-assigned dimensions, based on the results of Besicovitch, Jarnik, Kahane, and Kaufman).