

Dimensions of arithmetic sums of typical self-affine sets

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An important problem in fractal geometry is understanding fractal dimensions of self-affine sets.

In 1988, Falconer introduced the concept of affinity dimension, and showed that the Hausdorff and box-counting dimensions of a typical self-affine set (in some sense) are equal to its affinity dimension. In this talk, I will present some results on the dimensions of arithmetic sums of typical self-affine sets. It is based on joint work with Yu-Hao Xie.