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Yimin Xiao* (xiao@stt.msu.edu), Department of Statistics and Probability, Michigan State University, 619 Red Cedar Rd, East Lansing, MI 48824. *Fractal Properties of Operator Stable Lévy Processes*. Preliminary report.

It is known that operator (semi)-stable Lévy processes are operator (semi)-self-similar and their sample functions can generate various random fractals. By applying potential theory of multiparameter Lévy processes in Khoshnevisan and Xiao (2003, 2009), we determine the Hausdorff dimensions of the range, graph, and set of multiple points of a symmetric operator (semi) stable Lévy process $X = \{X(t), t \in \mathbb{R}_+\}$ in terms of the eigenvalues of its stability exponent.

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