

## **Reflected Brownian motion on nested fractals**

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Dealing with several problems of quantum physics related to the potential theory leads to analyzing Brownian motion on unbounded nested fractals and bringing the case to the process on a compact set by particular reflection.

We examine in which cases the reflected Brownian motion on nested fractals can be constructed as a strong Markov process and show steps of this construction.

The construction is a generalization of the one made on Sierpiński gasket in [1].

It is a joint work with Kamil Kaleta and Katarzyna Pietruska-Pałuba.

### REFERENCES

- [1] Pietruska-Pałuba, K. (1991) The Lifschitz singularity for the density of states on the Sierpinski gasket, *Probab. Theory Related Fields* 89 (1991), no. 1, 1-33.