

Conference Pathwise Stochastic Analysis and Applications

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**Fabrice Baudoin (Fractional Gaussian fields on the Sierpinski gasket
and related fractals)**

**Fractional Gaussian fields on the Sierpiński gasket
and related fractals**

We study the regularity of the Gaussian random measures $(-\Delta)^{-s}W$ on the Sierpiński gasket where W is a white noise and Δ the Laplacian with respect to the Hausdorff measure. Along the way we prove sharp global Hölder regularity estimates for the fractional Riesz kernels on the gasket which are new and of independent interest.

This is a joint work with Celine LACAUX.
