



## **Einladung zum Vortrag**

von

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### **Covariance function and maximal probabilities of Gaussian self-similar random fields with stationary rectangular increments**

Self-similar random fields that are an extension of self-similar stochastic processes are considered. Fractional Brownian sheet is an example of such Gaussian anisotropic self-similar random fields. It is well known that the fractional Brownian motion is a unique Gaussian self-similar process with stationary increments. In this talk the existence of Gaussian self-similar random fields with stationary rectangular increments, that are not fractional Brownian sheets, is presented. In order to establish the main result, some properties of covariance function for self-similar fields with rectangular increments have been proved and the class of covariance functions with specific properties were constructed. For the Gaussian self-similar random fields with stationary rectangular increments the upper maximal probabilities were constructed and the upper bounds for such probabilities for the normalized fields defined on a plane have been derived.

**Termin: Dienstag, 24. Mai 2016, 16 Uhr s. t.**

**Ort: Universität Ulm, Helmholtzstr. 18, Raum 220**

Interessenten sind herzlich eingeladen.  
Der Vortrag findet im Rahmen unseres Forschungsseminars statt.

gez. E. Spodarev