

Regularity of Weighted tensorized fractional Brownian textures

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In this presentation, we introduce a new model of textures, obtained as realizations of a new class of fractional Brownian fields. These fields are obtained by a relaxation of the tensor-product structure that appears in the definition of fractional Brownian sheets. We study statistical properties such as self-similarity, stationarity of rectangular increments and regularity properties. Additionally, we introduce natural functional spaces associated with these processes and propose a wavelet characterization of these spaces.