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Space Regularity for Solutions of the Stochastic Evolution Equation with Irregular Gaussian Processes

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4:00 pm
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Abstract:

We will present a stochastic calculus for Gaussian processes that have the covariance structure commensurable to a given function that satisfies some nonrestrictive conditions. In particular, this function could be r^{2H}, with $0 < H < 1$, which means that these processes could be as irregular as fBm with Hurst parameter less than $1/2$. In general, we will look at processes that are even more irregular.

Then we will look at the solution for the stochastic evolution equation with these processes, on the circle, and we will analyze their space regularity.

Refreshments will be provided.
For more information contact Darinka Dentcheva, Michael Zabarankin, Ionut Florescu, or call 201-216-5449.