1173-60-69   **Raluca Balan*** (`rbalan@uottawa.ca`), 150 Louis Pasteur, Ottawa, Ontario , Canada.
Stratonovich solution for the wave equation.

In this talk, we define a Stratonovich solution for the stochastic wave equation in spatial dimension $d \leq 2$, with time-independent noise and linear term $\sigma(u) = u$ multiplying the noise. The noise is spatially-homogeneous and its spectral measure satisfies an integrability condition which is stronger than Dalang's condition. We give a probabilistic representation for this solution, similar to the Feynman-Kac-type formula given by Dalang, Mueller and Tribe (2008) for the solution of the stochastic wave equation with spatially-homogeneous Gaussian noise, that is white in time. We also give the chaos expansion of the Stratonovich solution and we compare it with the chaos expansion of the Skorohod solution. (Received September 14, 2021)