

Statistics and Data Science Seminar

Intermittency properties for a family of SPDEs driven by fractional noise

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Abstract: The talk will focus on results related to the notion of intermittency: i.e. the property that a random field develops large values ("high peaks") when time gets large. We will first present it with known examples and, then, describe how this phenomenon appears in the context of SPDEs. In particular, we will illustrate how the intermittent behavior of the solution to an SPDE depends on the type of driving noise in the case of stochastic heat and wave equations driven by fractional noise. In the latter case, the results are obtained via a Feynman-Kac representation of the moments similar to the one introduced in Dalang-Mueller-Tribe (2008). This is based on a joint work with Raluca Balan (Univ. of Ottawa).

Wednesday, September 23 at 4:00 PM in SEO 636