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*On Intersections of Independent Space-Time Anisotropic Gaussian Fields*

Let  $X^H = \{X^H(s), s \in \mathbb{R}^{N_1}\}$  and  $X^K = \{X^K(t), t \in \mathbb{R}^{N_2}\}$  be two independent centered space-time anisotropic Gaussian random fields taking values in  $\mathbb{R}^d$ . In this talk, we study the existence of intersections of  $X^H$  and  $X^K$ . Furthermore, we determine the Hausdorff dimensions of the set of intersection times and the set of intersection points of the random fields, respectively.

This talk is based on a joint work with Zhenlong Chen and Jun Wang.