Minimax Interpolation of Smooth Random Processes

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Abstract

The problem of interpolation of stationary smooth random processes is considered. In the talk, optimal up to a constant minimax interpolation rates and corresponding interpolation methods will be obtained. Along with the minimax interpolation methods, we study interpolation methods based on splines. With the help of the minimax interpolation of random processes we provide also a solution to the problem of minimax functional interpolation over Sobolev's balls.