Mathematics > Probability

Extrapolation of stable random fields

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In this paper, we discuss three extrapolation methods for alpha-stable random fields with 1<alpha<=2. We justify them, giving proofs of the existence and uniqueness of the solutions for each method and providing sufficient conditions for path continuity. Two methods are based on minimizing the variability of the difference between the predictor and the theoretical value, whereas in the third approach we provide a new method that maximizes the covariation between these two quantities.

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