CORRECTION TO "DIFFERENTIABILITY OF SAMPLE FUNCTIONS IN GAUSSIAN PROCESSES"

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The Theorem on p. 106 [1] as it stands is vacuous. The conditions (2) and (3) together would imply that \( \beta < \alpha \). On the other hand the conditions \( \lambda > \alpha/2 \) and \( 0 < \lambda < \beta/2 \) would imply \( \alpha < \beta \). The difficulty can be overcome easily. Since the conditions (2) and \( 0 < \lambda < \beta/2 \) were assumed merely to ensure that \( P^*(C) = 1 \) we may replace them by Kolmogoroff’s condition.

\[
E\{ | \xi(t') - \xi(t'') | \gamma \} \leq K | t' - t'' |^{1+\delta} \quad \text{for } t', t'' \in T, \gamma, \delta > 0,
\]

which implies the continuity of almost every sample function of the separable, but not necessarily Gaussian, process \( \xi(t) \). The conditions (2) and \( 0 < \lambda < \beta/2 \) may also be replaced by the following condition due to W. Winkler [2],

\[
E\{ (\xi(t') - \xi(t''))^2 \} \leq \frac{b}{\ln^{3+\epsilon} \left( \frac{1}{t' - t''} \right)}, \quad \epsilon > 0.
\]

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REFERENCES


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