Then for fixed ω not in one of the exceptional sets and large enough k,

$$\sum_{i>k} M_{n_i}(\omega)2^{-n_i/6} \leqq \sum_{i>k} 2n_i \log 2v(n_i)2^{-n_i/6} \leqq 2 \log 2 \sum_{n>n_k} n^2 2^{-n/6} < \infty.$$

We apply the Borel-Cantelli lemma with respect to the measure $\mu[E, \omega]$ to see that $\mu[T(\omega), \omega] = 1$, where $T(\omega) = \bigcap_{k=1}^{\infty} \bigcup_{i \geqq k} \bigcup_j A(j, n_i)$. Since $A(j, n_i)$ is part of the boundary of the convex set $J(\omega) \cap C(j, n_i)$, which is a subset of $C(j, n_i)$, the length, $|A(j, n_i)|$, of $A(j, n_i)$ is less than $2\pi \cdot 2^{-n_i/6}$. Take $\epsilon_k = 2\pi \cdot 2^{-n_k/6}$. We have:

$$h_{\epsilon_k}^*(T(\omega)) \leqq \sum_{i \geqq k} \sum_j h(|A(j, n_i)|) \leqq \sum_{i \geqq k} M_{n_i}(\omega) h(2\pi \cdot 2^{-n_i/6}).$$

From (3) and the properties of $v(n)$ and $a(n)$, we obtain

$$h_{\epsilon_k}^*(T(\omega)) \leqq \sum_{i>k} 2n_i v(n_i) h(2\pi \cdot 2^{-n_i/6}) \log 2$$

$$= 2 \log 2 \sum_{i>k} n_i a(n_i) h(2\pi \cdot 2^{-n_i/6})/h(2\pi \cdot 2^{-n_i/6}) \log 2^{n_i} = 2 \sum_{i>k} a(n_i).$$

Since $\sum a(n_i) < \infty$, $\lim_{k \to \infty} h_{\epsilon_k}^*(T(\omega)) = 0$, so $h^*(T(\omega)) = 0$.

REMARK. From the uniformity of the Brownian motion, it would be surprising if $K(\omega)$ had actual corners. One might even suspect that if $k(t)$ satisfies (A) and $\lim_{t \to \infty} k(t) \log 1/t = \infty$, one would have $k^*(E) = \infty$ for any E such that $\mu[T(\omega) \cap E, \omega] > 0$.

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ON THE SAMPLE FUNCTIONS OF PROCESSES WHICH CAN BE ADDED TO A GAUSSIAN PROCESS

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Let $x(t)$ be a real measurable Gaussian process on an interval T with mean 0 and correlation function $R(s, t)$. We assume $\int_T \int_T R^2(s, t)\,ds\,dt < \infty$ so that $R(s, t)$ has an L_2 expansion $\sum \lambda_i \varphi_i(s)\varphi_i(t)$ with $\sum \lambda_i^2 < \infty$. We will write R for the compact integral operator gotten from $R(s, t)$. For any f satisfying $\int_T [R(t, t)]^{\frac{1}{2}} |f(t)|\,dt < \infty$ we can form the random variables $\theta(f, x) =$

Received September 12, 1962.

[1] Operated by the Massachusetts Institute of Technology with support from the U. S. Army, Navy, and Air Force.