

Finally we wish to indicate that a procedure analogous to those of [4] enables us to associate with every function f , meromorphic in \mathfrak{M} , a characteristic function $T(r, f)$, $r < 1$. Using the results of [5] and those of a work of Bers⁹ as well as the theorem of this paper it is possible to show that, under certain hypotheses, $|f|$ possesses boundary values almost everywhere on \mathfrak{F}^2 , if the $T(r, f)$ is uniformly bounded as $r \rightarrow 1$.

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⁹ The paper of Bers will appear in American Journal of Mathematics. A preliminary report of his work may be found in Comptes Rendus de l'Académie des Sciences, Paris, vol. 208 (1939), pp. 1273-1275 and 1475-1477.

MONOTONIC COLLECTIONS OF PERIPHERALLY SEPARABLE CONNECTED DOMAINS¹

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In my vain attempts to construct an example of a Moore space which is normal but not metric,² I have discovered a few simple and useful theorems about metric spaces which sound familiar but surprisingly do not seem to be known or in the literature. The following is such a theorem and deals with certain conditions under which a monotonic collection of domains contains a *countable* monotonic subcollection running upward through it. Application of the theorem to certain well ordered sequences is immediate.

Definitions.³ A collection G of point sets is said to be *monotonic* provided that if g_1 and g_2 are elements of G then either g_1 contains g_2 or g_2 contains g_1 . A subcollection H of a collection G of point sets is said to *run upward through* G provided that if g is an element of G there exists an element of H which contains g .

DEFINITION. A *point set* is said to be *peripherally separable* provided that its boundary is separable.

Let S denote a locally connected metric space.

¹ Presented to the Society, February 22, 1941.

² See F. B. Jones, *Concerning normal and completely normal spaces*, this Bulletin, vol. 43 (1937), pp. 671-677.

³ For the definition of certain terms and phrases, the reader is referred to R. L. Moore's *Foundation of Point Set Theory*, American Mathematical Society Colloquium Publications, vol. 13, New York, 1932, or to W. Sierpiński's *Introduction to General Topology*, Toronto, 1934, translated by C. C. Krieger.