(B) $$_{R}\sum_{X} S(X, R) \subset (S_0, \epsilon R)S(X, R)$$

and $\sum$ *is an m-plane through* P *such that*

(C) $$(\sum, \epsilon R_0) \supset S_0.$$

Then if $\epsilon \leqq 2^{-2000N^2}$ *there will exist a topological m-disk* $\bar{S}$ *such that*

$$S_0 S\left(P, \frac{1}{16} R_0\right) \subset \bar{S} \subset S_0 S(P, R_0).$$

Where $S(x, r)$ is a solid ball of centre x and radius r while (y, δ) is the set of points lying within δ of the set y.

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A CHARACTERIZATION OF THE ALGEBRA OF ALL CONTINUOUS FUNCTIONS ON A COMPACT HAUSDORFF SPACE

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This note is a complement to [1]. We consider a commutative, semi-simple and self-adjoint Banach algebra B and assume that B has a unit element and is regular. By $\mathfrak{M}$ we denote the space of maximal ideals of B and, applying the Gelfand representation, we consider B as an algebra of continuous functions defined on $\mathfrak{M}$. It is obvious that if B is $C(\mathfrak{M})$ (the algebra of all the continuous functions on $\mathfrak{M}$) the idempotents in any quotient algebra of B are always bounded. We prove here that this property characterizes $C(\mathfrak{M})$ and give an application of this result.

LEMMA 1. *Suppose that there exist constants* K *and* K_1, $K_1 < 1$ *such that to any real,* (*resp. non-negative*) *function* $f \in C(\mathfrak{M})$ *there exists an element* $f_1 \in B$ *such that* $\|f_1\| \leqq K \operatorname{Sup}_{M\in\mathfrak{M}} |f(M)|$, $f - f_1$ *is real* (*non-negative*) *and*

$$\operatorname{Sup}_{M\in\mathfrak{M}} |f(M) - f_1(M)| < K_1 \operatorname{Sup}_{M\in\mathfrak{M}} |f(M)|;$$

then $B = C(\mathfrak{M})$ *and for any* $f \in B \|f\| \leqq 4K(1-K_1)^{-1} \operatorname{Sup}_{M\in\mathfrak{M}} |f(M)|$.

PROOF. Define by induction $f_n = (f - \sum^{n-1} f_i)_1$; then $f = \sum_1^\infty f_n$.