MR739056 (85i:54039) 54F62 (54G05)

Joó, I. (H-EOTVO-2); **Stachó, L. L.** (H-SZEG-B)

Two remarks on pointwise periodic topological mappings.

Acta Sci. Math. (Szeged) **46** (1983), *no. 1-4,* 377–379.

The authors define a topological space to be a quasi-F-space if for every pair of sequences with disjoint sets of values the closure of some subsequence of one is disjoint from the closure of the corresponding subsequence of the other. They show this gives a strictly larger class of spaces than the F-spaces of L. Gillman and M. Jerison [Rings of continuous functions, Van Nostrand, Princeton, N.J., 1960; MR0116199 (22 #6994)] and prove two theorems which improve results of Stacho [Ann. Mat. Pura Appl. (4) 128 (1981), 207–225; MR0640783 (83b:32027)]: a pointwise periodic continuous mapping of a countably compact quasi-F-space onto itself is periodic (from which they conclude it is a homeomorphism) and a continuous pointwise periodic homomorphism of a connected topological group having a Baire topology into itself is periodic. The proofs are elementary; typographical errors are plentiful.

Reviewed by *D. E. Sanderson*