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The structure of locally compact, locally connected, T_5 spaces under $PFA(S)/S$. Preliminary report.

Under $PFA(S)/S$, a class of forcing models of ZFC with some features of the PFA and others of $V=L$, Frank Tall has shown the consistency of all T_5 (hereditarily normal, including Hausdorff) manifolds of dimension > 1 being metrizable.

This is an easy corollary of the following theorem:

Theorem 1. Assume $PFA(S)/S$. *Let X be a locally compact, locally connected T_5 space. Every component of X is the union of an open Lindelöf space L and countably many disjoint, closed, connected, countably compact noncompact spaces, each of which includes uncountably many cut points of the component and has exactly one point in the closure of L .*

Corollary. Assume $PFA(S)/S$. *Every locally compact, locally connected, T_5 space is hereditarily collectionwise normal and hereditarily countably paracompact.*

Theorem 2. Under $PFA(S)/S$, *every (clopen) component of every locally compact, locally connected, T_5 space is the union of a closed, rim-finite, monotonically normal subspace and a family of disjoint open Lindelöf subspaces.* (Received September 22, 2014)