1051-57-222 **Paul A Fabel*** (fabel@ra.msstate.edu), Drawer MA, Mississippi State, MS 39762. *Prime end theory and inverse limits of Hadamard spaces.* Preliminary report.

Stamdard prime end theory has strong ties to inverse limits of compact Hadamard spaces.

For example every contractible open planar set U admits a canonical internal metric whose completion is a Hadamard space, realized as the closure of a nested sequence of compact convex subspaces.

Moreover the topological inverse limit of the factors is the familiar closed unit disk, and U invariant homeomorphisms of the closure of U are semiconjugate to homeomorphisms of the inverse limit space.

This approach yields a new way of constructing higher dimensional analogues of standard prime end theory so that the aforementioned properties remain valid. (Received August 25, 2009)