An uncountable family of Generalized inverse limits spaces homeomorphic to the Gehman dendrite G_3

Sherzad T. Farhan
Soran University
`sherzadmath23@gmail.com`

We find an uncountable family of inverse sequences whose inverse limit spaces are homeomorphic to the Gehman dendrite G_3. The factor spaces of each inverse sequence are intervals and the bonding functions are upper semi-continuous set valued maps. There are uncountably many non-homeomorphic graphs in the family of bonding functions. In addition we explain how finitely or infinitely additional ramification points of order 4 can be added to the inverse limit space by modifying bonding functions in the family.
(joint work with Faruq A. Mena)