Alvaro Lozano Rojo
„Laminations with totally disconnected structure"

Laminations with totally disconnected structure appears naturally in dynamical systems and foliations. For example R.F. Williams [6] showed that expansive attractors of diffeomorphisms of manifolds has a laminated structure. In fact he proves those attractors are homemorphics to an inverse limit of branched manifolds. That kind of construction have been used by other in different contexts J. Bellisard, R. Benedetti and J-M. Gambaudo [2], F. Gaehler [4] and L. Sadun [5] independently extended this result to any tiling, showing that they are inverse limits of branched manifolds. With a similar scheme as in [2] R. Benedetti and J.M. Gambaudo has extended in [3] the previous result to G-solenoids (free actions of a Lie group G with transverse Cantor structure). F. Alcalde Cuesta, M. Macho Stadler and the author prove in [1] that any compact without holonomy minimal lamination of codimension 0 is an inverse limit, generalizing all previous results. Here we show that the same holds with out the assumption of minimality or the absence of holonomy.

[1] F. Alcalde Cuesta, A. Lozano Rojo, and M. Macho Stadler. Transversely Cantor laminations as inverse limits. Proc. Amer. Math. Soc., 139(7):2615-2630, 2011.
[2] J. Bellissard, R. Benedetti, and J.-M. Gambaudo. Spaces of tilings, finite telescopic approximations and gap-labelling. Comm. Math. Phys., 261(1):1-41, 2006.
[3] R. Benedetti and J.-M. Gambaudo. On the dynamics of G-solenoids. Applications to Delone sets. Ergodic Theory Dynam. Systems, 23(3):673691, June 2003.
[4] F. Gaehler. Cohomology of quasiperiodic tilings. In Aperiodic Order, Dynamical Systems, Operator Algebras and Topology, University of Victoria, 2002.
[15] L. Sadun. Tiling spaces are inverse limits. J. Math. Phys., 44(11):5410-5414, 2003.
[6] R. F. Williams. Expanding attractors. Publications mathematiques de l'I.H.E.S., 43:169a203, 1974.