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Steven Hurder* (hurder@uic.edu), University of Illinois at Chicago, 322 SEO (m/c 249), 851 S. Morgan Street, Chicago, IL 60607-7045. *Foliation index theory for weak solenoids*. Preliminary report.

A weak solenoid is a foliated space homeomorphic to the inverse limit of an infinite sequence of finite coverings of a fixed compact manifold without boundary. The discriminant is a profinite group associated to a weak solenoid, which is a measure of the non-homogeneity of the space and the leaves of its foliation. The discriminant can be either a finite group, possibly trivial, or a Cantor group, in which case the algebraic properties of this group yield topological invariants of the weak solenoid. In this talk, we will discuss the application of the structure theory of discriminant groups to the foliation index theory for weak solenoids. (Received January 28, 2019)