1056-57-1652   **Mark H. Meilstrup*** (`mark@math.byu.edu`), BYU Mathematics Deptartment, 292 TMCB, Provo, UT 84602, and **Gregory Conner** and **Dusan Repovs**. *Fundamental Groups of Solenoid Complements.*

A solenoid is a compact connected topological group that is an inverse limit of circles. When a solenoid is embedded in three space, its complement is an open three manifold. We discuss the fundamental groups of such manifolds, and show that the complements of different solenoids (arising from different inverse limits) have different fundamental groups. Also, embeddings of the same solenoid can give different groups; in particular, the nicest embeddings are unknotted at each level, and give an Abelian fundamental group, while other embeddings have non-Abelian groups. (Received September 22, 2009)