

CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, December 6
3:00 – 4:00 PM
Maria Sanford, Room 101

ONE-DIMENSIONAL COMPACT CONNECTED ABELIAN GROUPS AND EXTENSIONS BY PROFINITE GROUPS

PETER LOTH

SACRED HEART UNIVERSITY

Abstract: The one-dimensional compact connected abelian groups, called solenoids, are classified and constructed as topological subgroups of the torus \mathbb{T}^{\aleph_0} . For an arbitrary solenoid $\Sigma \neq \mathbb{T}$, we exhibit a non-splitting extension of Σ by a profinite group, dual to a non-splitting extension $0 \rightarrow \text{tor}(A) \rightarrow A \rightarrow F \rightarrow 0$ of abelian groups where F is a rank-1 torsion-free group $\neq \mathbb{Z}$. The constructed groups A are generalizations of Examples of Fuchs.

This talk is based on joint work with Dikran Dikranjan, Wayne Lewis and Adolf Mader.

To join us online use the following link: <https://ccsu.webex.com/meet/gotchev>
For further information: gotchevi@ccsu.edu; 860-832-2839; <http://mathcolloquium.sites.ccsu.edu/>