CCSU

DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Wednesday, February 20
11:30 AM – 12:30 PM
Maria Sanford, Room 103

COMPACT-OPEN-LIKE TOPOLOGIES ON C(X) – PROPERTIES AND APPLICATIONS

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Abstract: In this talk we address questions of when **C(X)** is a Hausdorff topological space and when **(C(X); +)** is a topological group in some topologies which are meets of systems of compact-open topologies from certain dense subsets of X. These topologies have arisen from the theory of epi-morphisms in lattice-ordered groups (in this context called "epi-topology") and the theory of monomorphisms in the category of spaces with filters. A basic necessary and sufficient conditions are developed, which at least yield enough insight to provide the general answer "sometimes Yes and sometimes No". We apply these topologies to describe the monomorphisms in the category **LSpFi** via **C(X)**. We will give examples of spaces with filters for which these topologies are Hausdorff but not group topologies and examples for which these topologies are group topologies.

For further information:
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