

CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES
COLLOQUIUM

Friday, April 7
3:00 – 4:00 PM
Maria Sanford, Room 101

**CARDINAL INEQUALITIES
FOR URYSOHN TOPOLOGICAL SPACES**

IVAN GOTCHEV

CENTRAL CONNECTICUT STATE UNIVERSITY

Abstract: In 1969, Arhangel'skiĭ answered a question of Alexandroff and Urysohn raised in 1923, by showing that $|X| \leq 2^{\chi(X)L(X)}$, whenever X is a Hausdorff topological space. Since then many mathematicians have improved this inequality in different ways. Most of those generalizations could be proven using the so called “closure method”.

In this talk, classical generalizations of Arhangel'skiĭ inequality proved by Arhangel'skiĭ and Šapirovskiĭ, Bella and Cammaroto, and Kočinac using the closure method will be discussed and new cardinal inequalities will be presented which extend or improve some of those, for the class of Urysohn topological spaces.

For further information:
gotchevi@ccsu.edu 860-832-2839
<http://www.math.ccsu.edu/gotchev/colloquium/>