

CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, May 4
2:00 – 3:00 PM
Maria Sanford, Room 101

CARDINAL FUNCTIONS IN TOPOLOGY

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Abstract

We will begin with several remarks about ordinal and cardinal numbers and their properties. Then we will recall some basic definitions from General Topology that will help us understand the meaning of Arhangel'skii's inequality. (In 1969, answering a nearly fifty-year old question of P. S. Alexandroff and P. S. Urysohn, A. Arhangel'skii proved that if X is a Hausdorff topological space then $|X| \leq 2^{\chi(X)L(X)}$, where $\chi(X)$ and $L(X)$ are respectively the character and the Lindelöf number of X .) At the end we will show how Arhangel'skii's inequality could be generalized for the class of T_1 -spaces.

For further information:

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