CCSU department of mathematical sciences COLLOQUIUM

Friday, November 18 3:00 – 4:00 PM Maria Sanford, Room 101

ON THE UPPER BOUND OF THE CARDINALITY OF HAUSDORFF TOPOLOGICAL SPACES

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<u>Abstract</u>: The systematic study of cardinal functions on topological spaces began in the mid-1960's. In 1967, Hajnal and Juhász and in 1969, Arhangel'skiĭ proved their famous cardinal inequalities giving an upper bound of the cardinality of a Hausdorff space X as a function of some other cardinal invariants of X. Since then, many mathematicians have extended or improved these two cardinal inequalities.

In this talk we will compare the upper bounds of the cardinality of a Hausdorff space given by these two and other well-known cardinal inequalities and at the end we will present a new improvement of all of the mentioned cardinal inequalities.

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