CCSU department of mathematical sciences COLLOQUIUM

Friday, October 6 3:15 – 4:15 PM Maria Sanford, Room 101

ON SOME GRAPH THEORY CONJECTURES ABOUT THE n-DIMENSIONAL BINARY HYPERCUBE

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Abstract: The *n*-dimensional binary hypercube Q_n is the graph with vertex set all binary sequences of length *n* and with edge set all pairs of binary sequences that differ in exactly one position. Due to the applications of binary hypercubes as prospective interconnection networks for parallel and distributed computing, in recent years much attention has been given to the problem of finding special types of Hamiltonian cycles or maximal cycles in Q_n with some deleted vertices.

In this talk we will recall some results related to the above-mentioned problem, which motivated some open conjectures.

No previous knowledge of Graph Theory will be necessary to understand this talk; therefore, it will be accessible to anyone interested in mathematics.

To join us online use the following link: <u>https://ccsu.webex.com/meet/gotchev</u>

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