CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Monday, March 31
3:25 – 4:25 PM
Maria Sanford, Room 105

INFINITE GAMES
AND PRODUCT SPACES

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Abstract: We introduce an infinite game played in a generalized metric space and show this game is related to a classic infinite game. A winning strategy in our new game implies certain topological covering and separation properties. Along the way, we obtain a generalization of a result concerning subspaces of products of metric spaces. Next we define a new yet natural topology on products of generalized metric spaces. For a certain class of spaces, this new type of product is shown to have a winning strategy in our infinite game. We conclude with some open problems.