

CCSU  
DEPARTMENT OF MATHEMATICAL SCIENCES

# COLLOQUIUM

Friday, November 15  
2:00 – 3:00 PM  
Maria Sanford, Room 101

## ORTHOGONAL REPRESENTATIONS OF GRAPHS

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**Abstract:** One way to represent a graph geometrically is via the orthogonality relation on some inner product space; the vertices of the graph are put in correspondence with vectors so that the orthogonality or nonorthogonality of the vectors captures the adjacency relation of the graph in some precise way. A difficult problem then emerges, namely to determine for a given graph the smallest number of dimensions in which it can be represented. This talk will survey some fundamental results and techniques related to this problem, as well as some current research and open problems.

*For further information:*  
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