CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, March 30
2:00 – 3:00 PM
Maria Sanford, Room 101

CAN WE GENERATE HAMILTONIAN CYCLES THROUGH NONPERFECT MATCHINGS OF HYPERCUBES?

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Abstract: For my special topic, I investigated the possibility of extending nonperfect matchings to Hamiltonian cycles in hypercubes. It is known that a Hamiltonian cycle can be generated through every perfect matching in a hypercube (Fink, 2007). It has been conjectured that every matching in a hypercube can be extended to a Hamiltonian cycle. Some authors claim that this is true for dimensions 2, 3, and 4. It appears that little is known for higher dimensions. In this talk, I will explain how Hamiltonian cycles can be generated through nonperfect matchings in dimensions 2, 3, and 4. I will also report on the current status of my research in dimension five.

For further information:
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