

CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES
COLLOQUIUM

Friday, September 16
4:30 – 5:30 PM
Maria Sanford, Room 101

**DIGITAL PATTERNS AND
DOMINANCE ORDER IN BASE-3/2**

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Abstract: In this talk we explore the base- $3/2$ representations of non-negative integers. We explain how to construct these representations and identify digit patterns within them. A special matrix is recursively defined in order to describe and understand these patterns. Connections are drawn between this matrix and a partial order on non-negative integers. Properties of this order are investigated by using two visualization techniques.

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