

*Department of Mathematics,  
University of California San Diego*

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## Math 269 - Combinatorics Seminar

**Prof. Andre Kundgen**

Cal State University San Marcos

## Nonrepetitive Graph Coloring

### Abstract:

A **repetition** in an edge-colored graph is a path in which the sequence of colors in the first half of the path is identical to that in the second half. In 2002 Alon, Grytczuk, Haluszczak, and Riordan showed that every  $k$ -ary tree has a repetition-free edge-coloring with at most  $4k$  colors. We present a simple procedure for obtaining repetition-free edge-colorings of  $k$ -ary trees with at most  $3k + 1$  colors. We will also discuss some related vertex-coloring questions.

Host: Jacques Verstraete

**Tuesday, February 13, 2018**

**2:00 PM**

**AP&M 7421**

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