

Math & Computer Science Colloquium

Presents:

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Speaking on:

Symmetry Groups: The mathematical connection between patterns in Moorish architecture and the artwork of M.C. Escher

The mathematical structure of symmetrical patterns can be studied using group theory. The Moors built many magnificent buildings richly decorated with geometric patterns during their rule of the Iberian peninsula (711-1492). The graphic artist M.C. Escher visited southern Spain in 1922 and was captivated by the patterns that richly decorate the architecture of the Alhambra, Alcazar, and other Moorish buildings. After a second visit to Spain in 1935, Escher became obsessed with creating patterns of interlocking figures based on these elaborate tiling patterns. While Escher had no formal mathematical training, he used mathematical methods grounded in scientific literature to study these patterns. We will view these patterns through the lens of group theory, one of the great mathematical accomplishments of the 19th century. This talk will be highly visual with many pictures of Escher's works and Moorish architecture.

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Palenske 227

3:30 PM



