# Michigan Math Club

## Thursday at 4pm in the Commons
## Free Pizza and Pop

# A Mathematician in the Alhambra

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### Abstract for 12 November 2009

The Alhambra is a Moorish palace located in Granada, Spain, constructed during the mid 14th century. It is decorated from floor to ceiling with elaborate patterns of many different shapes and colors. This palace is thought to have been an inspiration for M.C. Escher's famous tiling artwork.

A mathematician in the Alhambra is confronted with the irresistible compulsion to classify the exquisite patterns there in terms of mathematical objects known as symmetry groups. There are precisely 17 symmetry groups associated to regular tilings of the plane. How many of these are actually represented in the Alhambra has not been settled.