

# MATH and PIZZA

## Partitions, Pictures, Pentagonal Numbers, and the Letter...q

Speaker

Glenn Lilly

National Security Agency (NSA)

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UK Department of Mathematics



### Biography:

Glenn Lilly received his doctorate from the University of Kentucky in 1991.

He joined the National Security Agency (NSA) shortly thereafter. He spent the bulk of his career in crypto-algorithm and protocol design and evaluation.

He is currently the chief of the Mathematics Research Group at NSA.

**Date:** Thursday, April 19, 2012

**Time:** 4:00pm - 5:00pm

**Room:** 208, Classroom Building

### Abstract:

Combinatorics and generating functions is a highly intuitive branch of mathematics. We will discuss a combinatorial proof of Euler's pentagonal number theorem, first introducing the concept of a partition of a positive integer, and then that of a generating function.

The talk will be accessible to undergraduate math majors, and it will also touch upon employment at the National Security Agency.

*All students  
with an interest in Mathematics  
are welcome to attend!!*

**UK Math Club**  
[www.math.uky.edu/~mathclub](http://www.math.uky.edu/~mathclub)