## MATH and PIZZA

## **Visualizing Spheres**

Speaker

## Niles Johnson

The Ohio State University, Newark

Sponsored by

**UK Department of Mathematics** 



*All students with an interest in Mathematics are welcome to attend* !! Date: Thursday, October 11, 2012 Time: 4:00pm - 5:00pm Room: 247, Classroom Building

## Abstract:

Spheres are shapes of fundamental importance and beauty. 1-dimensional and 2-dimensional spheres are probably familiar: a circle and the surface of a beach ball. Higher-dimensional spheres are wonderfully complex and fascinating.

In this talk we will describe spheres and a mathematical structure known as a fibration which allows us to visualize the 3-sphere and 7-sphere. This will include two animated visualizations, and an explanation of the mathematics involved in making them.

We will also explain what makes 3, 7 (and 15) so special.

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