Michigan Math Club Thursday at 4pm in the Commons Free Pizza and Pop Tiling More Than Kitchen Floors

Angela Kubena

Abstract for 14 April 2011

For every integer n, there are regular polygons with n sides. However, there are only 5 regular polyhedra (the Platonic solids). We can view polygons and polyhedra as regular tilings of circles and spheres, respectively. What happens when we move to higher dimensions? What about when we tile other kinds of spaces? We will investigate these questions, and there will be lots of pictures (along with some geometry, linear algebra, and group theory) along the way. No prior redecoration experience necessary!