

Michigan Math Club

Thursday at 4pm in the Commons

Free Pizza and Pop



An Unreasonable Story About Symmetry

Moon Duchin

Abstract for 11 March 2010

I will tell a winding story that brings together quaternions, high-dimensional polytopes, unexpected symmetries, soap bubbles and fake spheres. This story has some historical content, and it raises a range of interesting questions about the development of math. Various authors have discussed the ways in which the process of discovery and application in math can seem “unreasonable” or surprising and this talk will touch on some of these themes. Sometimes new ideas explain old observations, sometimes new definitions seem to take on a life of their own and even appear in nature, and our expectations of structure and order in math can be both useful and misleading.

