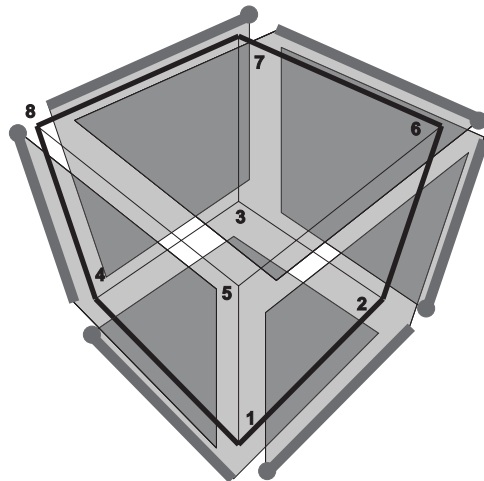


*Department of Mathematics and Statistics*  
*Colloquium Lecture Series*

*Gordon Williams*  
*Ursinus College*

**Representing the Archimedean Polyhedra as  
Quotients**

This talk will trace some of the history and development of approaches to understanding and defining polyhedra, as well as present the results of a collaboration attempting to represent the well known Archimedean polyhedra in a very modern way, in terms of a structure called an *abstract regular polytope*. During the historical portion of the talk we will explore some of the ways people have struggled to make their intuition consistent with their theorems and definitions when discussing polyhedra. The latter portion of the talk will provide a brief introduction to the theory of abstract polytopes, leading to a discussion of the methods and techniques developed by the speaker and a coauthor to represent figures such as the classical Archimedean polyhedra as quotients of regular abstract polytopes. It will address some of the current lines of investigation as well as directions of possible future investigation.



*Tuesday, March 31, 2009*

*Chapman 106*

*1:00–2:00*

*Refreshments after the talk in Chapman 101A*