



Making Designs A Reality

The innovative design of the Sydney Opera House stymied builders for years until they realized that all the project's specifications could be met with triangles cut from the same sphere. Since all the pieces were of the same type and from a surface with well-established geometrical properties, the requisite calculations (such as determining structural forces) were simplified considerably and the dream became a magnificent reality.



Photo courtesy of Gabriel Ditu, www.gabrieditu.com.



The **Mathematical Moments** program promotes appreciation and understanding of the role mathematics plays in science, nature, technology, and human culture.

www.ams.org/mathmoments