MATH CLUB

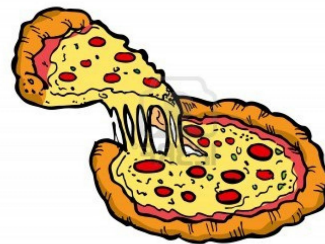**Thursday February 26th at 1pm in Wachman 617**

Barbara Nimershiem Presents:
A Borromean Rings Quilt: Visualizing the Hyperbolic
Complement of the Borromean Rings

Abstract: Take an extension cord. Tangle and knot it like crazy. Plug the ends together. You now have what mathematicians would call a knot. Weave in a few more extension cords, plug their ends together, and you get a link.

You can learn a lot by studying knots and links themselves, but, in an interesting twist, you can learn even more by studying everything BUT the knots and links! The space around a knot or link is called its complement, and an amazing theorem of William Thurston says that, with well understood exceptions, the complement of a knot or link is hyperbolic. In other words, if you put the nicest possible geometry on the space surrounding most knots or links, that geometry is not our familiar flat, Euclidean one, but rather negatively curved, hyperbolic geometry.

In this talk, we will use a quilt to help us visualize the complement of a particularly beautiful link---the Borromean rings.

**As always,
FREE PIZZA!**