Santa Clara University
Math/CS Colloquium Series
Winter 2018

Tuesday, March 6th at 3:50 in O'Connor 104

Cylinder vs. Möbius Band: Seeing the Difference

Thomas Banchoff, Halmos Visiting Professor
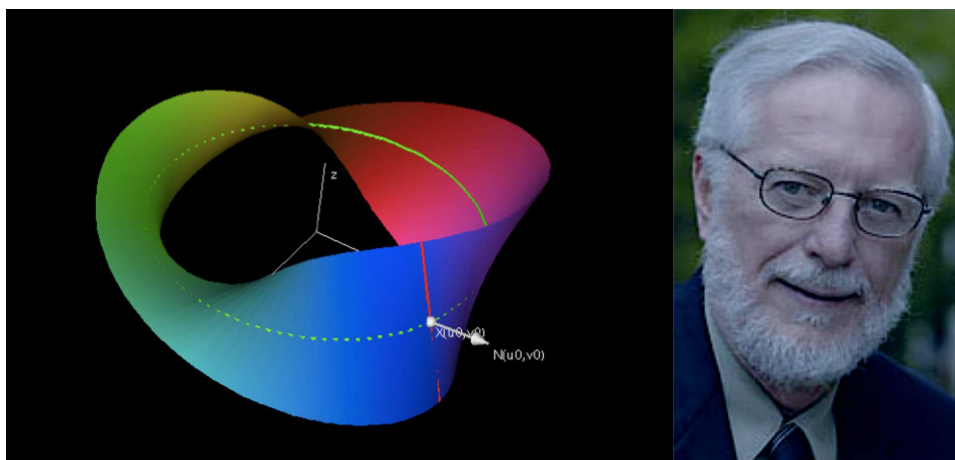### SCU Department of Mathematics and Computer Science

Photo by John Forasté

What does basic calculus (think Intermediate Value Theorem) tell us about the difference between a cylinder and a Möbius band? Why did Möbius invent his strip 160 years ago? How did his invention highlight the difference between a curve in the plane and a surface in space? How do Klein bottles fit into the story?

Come for a lively talk illustrated by physical models and computer graphic images. You'll find a modern "twist" on a classical subject, as well as an introduction to *characteristic classes* in the geometry of surfaces.

Speaker Bio: Having retired from Brown University after teaching for 50 years, Thomas Banchoff is Halmos Visiting Professor at SCU. He served as President of the MAA, 1999–2000, and won their Haimo Award for Distinguished University Teaching, as well as the NSF Director's Award for Distinguished Teaching Scholar. Other visiting positions in California have included UCLA, Stanford, and USF.

If you have a disability and require a reasonable accommodation, please call Frank Farris 408-554-4430 or 1-800-735-2929 (TTY - California Relay).