Abstract: Students and teachers of geometry have always relied on diagrams and models for visualizing relationships in the plane and in ordinary three-dimensional space, and for almost two hundred years mathematicians have struggled to find ways to deal with geometric phenomena in a fourth spatial dimension. All that changes with computer graphics. We can now see and manipulate objects in new ways and share insights with our students and colleagues, in mathematics as well as in physics, philosophy, literature and modern art. Salvador Dali had a particular fascination with science and mathematics and this presentation will display a number of his favorite four-dimensional images.

The Speaker: Among numerous teaching awards, Professor Banchoff is a recipient of the Lester Ford Award for outstanding expository writing (1978) and MAA National Award for Distinguished College or University Teaching of Mathematics (1996). He was invited speaker at the International Congress of Mathematicians in Helsinki in the section of Pedagogy, Computer Animation and the Geometry of Surfaces in 3- and 4- Space. http://www.math.brown.edu/TFBCON2003/