CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, February 5
2:00 – 3:00 PM
Maria Sanford, Room 101

CONSTANT MEAN CURVATURE SURFACES IN THE EUCLIDIAN SPACE AND THEIR DYNAMICAL INTERPRETATION

OSCAR PERDOMO

CENTRAL CONNECTICUT STATE UNIVERSITY

Abstract: In 1841, Delaunay showed that if one rolls a conic section on a line in a plane and then rotates about that line the trace of a focus, one obtains a constant mean curvature surface of revolution. When the conic is a parabola we obtain a Catenoid, when the conic is an ellipse, the surface is embedded and it is called an undoloid and when the conic is a hyperbola the surface is not embedded and it is called a nodoid. In this talk we will show a similar dynamical interpretation for Twizzlers, which are other types of well known constant mean curvature surfaces in the Euclidean space. Several new properties for Twizzlers will be explained along with a precise description of their moduli space. The talk will be self-contained and very accessible to everyone.

For further information:
gotchevi@ccsu.edu 860-832-2839
http://www.math.ccsu.edu/gotchev/colloquium/