

CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, January 30

2:00 – 3:00 PM

Maria Sanford, Room 101

TEACHING TOPOLOGY TO CHILDREN: A “TWIST” ON THE DEVELOPMENT OF GEOMETRIC THINKING IN SCHOOL

MATTHEW V. MACKRITIS

CENTRAL CONNECTICUT STATE UNIVERSITY

Abstract: For American students, the lack of mature spatial and geometric reasoning skills has been articulated in many research studies. In particular, the fostered development of these skills amongst elementary school students has been increasingly under attack from mathematics education researchers. Does the problem lie with the curricula, the pedagogical approach, insufficient teacher content knowledge, or maybe some combination thereof? This is heavily debated. However, my goal in this talk is not to address, per se, these macro-views, nor to attempt to explicate a panacea. Instead, I will present my ideas on the introduction of topology to elementary-aged children, as a way of helping further the geometric reasoning abilities of students. I will discuss various topological topics, their importance to geometric development, and conduct hands-on activities.

For further information:

gotchevi@ccsu.edu 860-832-2839

<http://www.math.ccsu.edu/gotchev/colloquium/>