## Hands-on Combinatorics

Cuisenaire rods were developed in the 1930s by a Belgian elementary school teacher; they are blocks color coded by length used to help students visualize addition. A 1992 article "Cuisenaire Rods go to College" suggests how these manipulatives can support more advanced material. I will share my experiences facilitating teacher professional development workshops and teaching undergraduate classes using these tools to explore several integer sequences and triangles of numbers. This talk will be a mix of pedagogical and mathematical topics.