CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

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

THE OCTONIONS

NELSON CASTANEDA

CENTRAL CONNECTICUT STATE UNIVERSITY

Abstract

The algebra of octonions or Cayley numbers is one of the only four normed division algebras over the reals. The other three are the algebras of the reals, the complexes, and the quaternions. We will discuss the importance of the octonions for the theory of Lie groups and some applications in topology and geometry.