

MATHEMATICS DEPARTMENT
North Carolina State University

ALGEBRA SEMINAR

Friday, December 2, 2005

Professor Amassa Fauntleroy
NC State University

Calabi–Eckmann Manifolds

ABSTRACT: Calabi and Eckmann were the first to observe that the product of two odd dimensional spheres carries the structure of a compact complex manifold. These manifolds map onto projective algebraic varieties with projective varieties as fibers but are not themselves projective varieties. We will explain these examples and show why they fail to be projective. The key ideas are from elementary complex variable theory (i.e. log functions) and from elementary algebraic topology, the well known homology of the n -sphere.

3:00 - 3:50 pm HA 335

Faculty and Students are invited to attend.