

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

**THE GEOMETRY OF F-THEORY: THREE TALES
ON ELLIPTIC FIBRATIONS AND RESOLUTIONS
OF SINGULARITIES**

Mboyo Esole
(Harvard)

September 11, 2013, 4:00 – 5:00pm
Math/Computer Science, Room 148
111 Cummington Street, Boston

Tea: 3:45pm in Room 144

Abstract: : The theory of elliptic curves is an elegant and vast subject in mathematics that can be traced back to ancient Greece and beyond. Nowadays, elliptic curves are instrumental in number theory, cryptography, geometric modeling and string theory. The subject of elliptic fibrations took off with the work of Kodaira, Neron and Tate. A new perspective on elliptic fibrations appeared with the discovery of F-theory by Cumrun Vafa. In my talk, I will give an introduction to the subject and presents some very interesting geometry related to resolutions of singularities, arithmetic properties of elliptic fibrations and topological invariants of singular varieties. This will cover some of my own work in different collaborations with both mathematicians and physicists

See <http://math.bu.edu/research/geom/seminar.html> or contact Si Li sili@math.bu.edu for more information.