

1077-VJ-2579 **James A Fullwood*** (jfullwoo@math.fsu.edu), 2006 Sheridan Rd., Tallahassee, FL 32303. *On global invariants of fibrations of smooth complete intersections.*

A fibration of smooth complete intersections is a proper surjective map of varieties such that the generic fiber is some fixed smooth complete intersection in projective space. We discuss a program for computing invariants of fibrations of complete intersections as functions of invariants of the base of the fibration. In particular, we introduce a general method which culminated in generating functions for the Euler characteristic and all Hirzebruch invariants of elliptic fibrations of all dimensions. In the case of Calabi-Yau elliptic fibrations we highlight applications to string theory. (Received September 22, 2011)