

abstract

Members Seminar
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

In its simplest form, Hirzebruch's 1953 Riemann-Roch theorem is an identity between certain combinations of Hodge numbers on the one hand and certain combinations of Chern numbers on the other. I will show that there are no other such identities, beyond HRR. I will also discuss the topological non-invariance of Hodge and Chern numbers, exhibiting systematic examples of diffeomorphic varieties with distinct Hodge and Chern numbers. This leads to the complete solution of a problem posed by Hirzebruch in connection with Riemann-Roch. (This talk is based in part on joint work with S. Schreieder.)