MICHAEL ALBANESE, UQAM

The Yamabe Invariant of Complex Surfaces

The Yamabe invariant is a real-valued diffeomorphism invariant coming from Riemannian geometry. Using Seiberg-Witten theory, LeBrun showed that the sign of the Yamabe invariant of a Kähler surface is determined by its Kodaira dimension. We consider the extent to which this remains true when the Kähler hypothesis is removed. This is partly based on joint work with Claude LeBrun.