

LECTURE SERIES

Memorial Conference for the founders of index theory: Atiyah, Bott, Hirzebruch and Singer

May 25, 2021

9:00am ET- *Virtually*



Claire Voisin

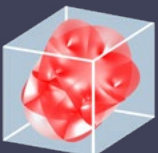
Collège de France

"K-theory and characteristic classes in topology and complex geometry (a tribute to Atiyah and Hirzebruch)"

We will discuss the K-theory of complex vector bundles on topological spaces and of holomorphic vector bundles on complex manifolds. A central question is the relationship between K-theory and cohomology. This is done in topology by constructing characteristic classes, but other constructions appear in the holomorphic or algebraic context. We will discuss the Hirzebruch-Riemann-Roch formula, the Atiyah-Hirzebruch spectral sequence, the role of complex cobordism, and other tools developed later on, like the Bloch-Ogus spectral sequence.

Talk chair: Baohua Fu

**This lecture will be held virtually.
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