Vector Bundles in Geometry and Analysis

Prof. Eitan Sayag

2017–18–B

• vector bundles and K-groups of topological spaces

• Bott’s Periodicity theorem and applications to division algebras

• Index of Fredholm operators and K-theory

• If time permits: smooth manifolds, DeRham cohomology, Chern classes, Elliptic operators, formulation of Atiyah-Singer index theorem, relations to Gauss-Bonnet theorem

201 Math 17:00-19:00, Wed