The Department of Mathematics
2017–18–B term

Course Name  Vector Bundles in Geometry and Analysis

Course Number 201.2.5051

Course web page

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Office Hours  https://www.math.bgu.ac.il/en/teaching/hours

Abstract

Requirements and grading

Course topics

• 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

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1Information may change during the first two weeks of the term. Please consult the webpage for updates