Metrics and connections on almost complex and on Kähler manifolds

Sumanjit Sarkar

Abstract

In these classes, problems on the operations on vector bundles, as well as the connection and curvature will be covered, including Hermitian connections, the Levi-Civita and Chern connections, Chern classes etc. Problems on the basic properties of Kähler metrics, including geodesics and connectionss will be taught.