Meiji University
Center for Mathematical Modeling and Applications

CMMA Colloquium

第24回 現象数理学コロキアム

24

Moduli of vector bundles on compact Riemann surfaces.

The lecture will be held in English.

講演者：

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Abstract:
 The theory of holomorphic vector bundles on a compact Riemann surface is a vast "non-abelian" generalisation of the classical theory of the Jacobian (or Albanese) variety. The Jacobian, a complex torus,arose in the work of Abel, Jacobi and Riemann on abelian integrals on compact Riemann surfaces. The non-abelian generalisation is achieved by replacing the homology group by the fundamental group of the surface and considering unitary representations of the fundamental group.
 In this talk I will give an overview of some aspects of the subject. Some of the topics to be dealt with are:
 ・Algebro-geometric notions of stability of vector bundles and moduli spaces and relationship with unitary representations of the fundamental group.
 ・Relation to Yang-Mills and conformal field theories in theoretical physics.

2016年 12月 16日（金）

17：00〜18：00
会場：明治大学 中野キャンパス
高層棟 6 階　603 教室

※ 参加費無料、事前申し込み不要です。どなたでもご参加いただけます。

明治大学先端数理科学インスティテュート
現象数理学研究拠点

MIMS

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