

Columbia University

Algebraic Geometry Seminar

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VECTOR BUNDLES AND LAX EQUATIONS ON ALGEBRAIC CURVES

We establish a link between Hitchin integrable structure of the moduli space of vector bundles on algebraic curves and provide explicit parametrization of this space based on Tyurin parameters for stable holomorphic vector bundles. Infinite-dimensional generalization (affine) of the Hitchin system will be defined. In the case of elliptic curve with one puncture our construction gives field generalization of the elliptic Calogero-Moser system.

Friday, October 26, 2001

2:30pm

Mathematics 417