The Hong Kong University of Science and Technology

Department of Mathematics

Seminar on Pure Mathematics

Frobenius map and moduli spaces of parabolic sheaves I

By

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Abstract

For a variety over a field of positive characteristic, it is an important question if it is Frobenius splitting. A Frobenius splitting variety has very nice vanishing theorems of cohomology and has nice singularities. The theory also apply to varieties defined over a field of characteristic zero. A viariety defined over a field of characteristic zero is called of Frobenius splitting type if its modulo p reductions are Frobenius splitting for almost p. In this series of talks, I will review the theory of Frobenius splitting for varieties over a field of positive characteristic and varieties defined over a field of characteristic zero . Then I will prove that moduli spaces of parabolic sheaves and generalized parabolic sheaves on curves are of Frobenius splitting type.

Date:　　　*Monday, 06 October 2014*

Time:　　　*3:00 p.m.-5:00 p.m.*

Venue:　　　*Room 3501, Academic Building, (near Lifts 25&26), HKUST*

All are welcome!