

Hong Kong Geometry Colloquium

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Hecke tangents and Hitchin discriminant

Abstract

On the moduli space of stable bundles over a curve, there exist a distinguished family of rational curves, called Hecke curves. We will discuss the relation between the tangent vectors to Hecke curves and the discriminantal hypersurface in the cotangent bundle of the moduli space associated to the Hitchin map. As an application, a simple proof of non-abelian Torelli theorem will be explained, which is in the spirit of Andreotti's proof of abelian Torelli theorem. This is a joint work with S. Ramanan.
