HACETTEPE ÜNİVERSİTESİMATEMATİK BÖLÜMÜ

GENEL SEMİNERİ

(HACETTEPE MATHEMATICS GENERAL SEMINAR)

Tarih: 30 Eylül 2014, Salı

Saat: 15:00

Yer: Yaşar ATAMAN Seminer Salonu

Konuşmacı: Prof. Dr. Francis BONAHON (University of Southern Califonia, USA)

Başlık : Parametrizing the Hitchin component

Özet : Much of two-dimensional hyperbolic geometry can be rephrased in terms of homomorphisms from the fundamental group of a surface to the Lie group $SL_2(R)$. More precisely, in the space of all such homomorphisms, those that arise from hyperbolic geometry form a whole connected component called the Teichmüller component. Replacing $SL_2(R)$ by $SL_n(R)$, there similarly exists a preferred component in the space of all homomorphisms from a surface group to $SL_n(R)$, called the Hitchin component. Hitchin proved that the Hitchin component is homeomorphic to an open ball of dimension $2(g-1)(n-1)(n+1)$ where g is the genus of the surface. I will present another parametrization of the Hitchin component, which is more closely connected to the geometric and dynamic properties of the homomorphisms involved. This is joint work with Guillaume Dreyer.