

1054-53-175

Xiaofeng Sun* (xis205@lehigh.edu), 14 E. Packer Ave., Department of Mathematics, Lehigh University, Bethlehem, PA 02138. *Teichmuller Space of Polarized Calabi-Yau Manifolds.*

In this talk we will discuss the Teichmuller space of polarized Calabi-Yau Manifolds, its properties and the corresponding period maps. In particular we will study the injectivity of the period maps, namely the Torelli problem. We will discuss the invariance of the polarized CY symplectic form. We will also give simple proofs of the Torelli theorem for the Teichmuller space of polarized algebraic Hyper-Kahler manifolds. (Received September 13, 2009)