

Meeting: 1003, Atlanta, Georgia, SS 30A, AMS Special Session on Analysis Problems in Modern Physics, I

1003-58-299 **Zhiqin Lu*** (zlu@math.uci.edu), Department of Mathematics, UC Irvine, Irvine, CA 92697.

Chern Classes on CY moduli.

In this talk, I will present some new results on the Weil-Petersson volume and the Euler characteristic number of CY moduli. In particular, I will show that the volume the Hodge metric is a rational number. I will also show that the integrations of the invariant polynomials of the curvature operator of the Weil-Petersson metric are bounded. The work is joint with my student Eisuke Natsukawa. (Received September 08, 2004)