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

Jun Li, Chiu-Chu Melissa Liu* (ccliu@math.harvard.edu), Kefeng Liu and Jian Zhou.

Gromov-Witten Invariants of Toric Calabi-Yau Threefolds.

We developed a mathematical theory of the topological vertex, an algorithm proposed by M. Aganagic, A. Klemm, M. Marino, and C. Vafa on effectively computing Gromov-Witten invariants of any toric Calabi-Yau threefold in all genera and all degrees. (Received September 09, 2004)