



THE UNIVERSITY OF
CHICAGO

Departments of Mathematics and Statistics
ALGEBRAIC GEOMETRY SEMINAR

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Quantum Cohomology and Conformal Block Divisors

WEDNESDAY, February 5, 2014 from 4:30–6:00 PM
312 Eckhart Hall, 5734 S. University Avenue

ABSTRACT

Recent work of Fakhruddin has refocused attention on conformal block divisors on moduli spaces of marked curves, in particular to the birational geometry of moduli spaces of genus zero curves with marked points: Conformal blocks give an interesting family of numerically effective divisors, and hence relate to well known conjectures on nef cones of moduli spaces of curves.

I will describe joint work with Angela Gibney and Swarnava Mukhopadhyay where we study the higher level theory of these divisors: in particular producing vanishing theorems, new symmetries and non-vanishing properties of these divisors (one of our tools is the relation to quantum cohomology of Grassmannians). These properties are then applied to the study of moduli spaces.

Organizers:

For further information on this event, please email Lek-Heng Lim at lekheng@galton.uchicago.edu or Madhav Nori at nori@math.uchicago.edu.

UCAGS Seminar URL: <http://www.stat.uchicago.edu/~lekheng/ag.html>