BOSTON UNIVERSITY GEOMETRY SEMINAR

POLYNOMIALITY AND WALL CROSSINGS IN HURWITZ THEORY

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April 18, 2012, 3:00 – 4:00pm
Math/Computer Science, Room B21
111 Cummington Street, Boston

Tea: 2:45pm in Room 144

Abstract: In this talk I will present a story that began with the observation of Goulden-Jackson-Vakil that families of Hurwitz numbers tend to have interesting polynomiality or piecewise-polynomiality aspects. Cavalieri-Johnson-Markwig subsequently exploited the combinatorics suggested by tropical geometry in order to gain a good understanding of this phenomena, and to be able to describe wall crossings. The story is now evolving with an attempt of lifting these observations from the level of "numbers" to the level of "cycles". Again, the parallel with tropical geometry helps shed light on the combinatorial features of certain families of Hurwitz classes. The story is understood so far in genus 0 and becomes substantially more complicated in higher genus. The most recent work discussed is joint work with Aaron Bertram and Hannah Markwig.

See `http://math.bu.edu/research/geom/seminar.html` or contact Takashi Kimura *kimura@math.bu.edu* for more information.