BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

SCHUBERT CALCULUS OF WEIGHTED GRASSMANNIANS

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Jan 28, 2013, 4:00 – 5:00pm
Math/Computer Science, Room 148
111 Cummington Street, Boston

Tea: 3:45pm in Room 144

Abstract: After a brief introduction to Schubert calculus, we will explain our results on the computation of Schubert structure constants for weighted Grassmannians. Namely, the equivariant cohomology of weighted Grassmannians has a natural Schubert basis (weighted Schubert classes) and the structure constants of the ring are computed in terms of the Knutson-Tao jigsaw puzzles. We also managed to prove that the structure constants are positive in a sense of Graham, i.e. they are polynomials in certain parameters with non-negative coefficients. If time allows, I will also mention the twisting of Schur functions that allow us to present the cohomology rings of weighted Grassmannian. This is joint work with H. Abe.

See `http://math.bu.edu/research/geom/seminar.html` or contact Si Li *sili@math.bu.edu* for more information.