

Topology, Algebraic Geometry, & Dynamics Seminar

The Peterson Isomorphism: Moduli of Curves and Alcove Walks

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In this talk, I will explain the combinatorial tool of folded alcove walks, in addition to surveying a wide range of applications in combinatorics, representation theory, and algebraic geometry. As a concrete example, I will describe a labeling of the points of the moduli space of genus zero curves in the complete complex flag variety using the combinatorial machinery of alcove walks. Following Peterson, this geometric labeling partially explains the "quantum equals affine" phenomenon which relates the quantum cohomology of this flag variety to the homology of the affine Grassmannian. This is joint work with Arun Ram

Date: Friday, November 22, 2019

Time: 1:30-2:30 pm

Place: 4106 Exploratory Hall

For special accommodations, please contact David Carchedi via email at dcarched@gmu.edu.