

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

GEOMETRY, ARITHMETIC, AND DYNAMICS ON CHARACTER VARIETIES

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October 9, 2019, 4:00 – 5:00pm
Math/Computer Science, Room B39
111 Cummington Street, Boston

Tea: 3:45pm in Room B24

Abstract: Moduli spaces of special linear rank two local systems (with prescribed boundary traces) on punctured surfaces are basic objects in geometry. We show that these spaces are log Calabi-Yau, and relate this property to a symmetry of generating series for counts of multicurves on surfaces. Using mapping class group dynamics and differential geometric tools, we also establish arithmetic and geometric structure theorems for the integral points and maps from affine lines into these spaces. The talk will emphasize interactions between results on moduli spaces and elementary observations about surfaces and local systems; time permitting, we also discuss other results further exploring this theme.

See <http://math.bu.edu/research/geom/seminar.html> or contact Yu-Shen Lin (yslin@bu.edu) or Siu-Cheong Lau (lau@math.bu.edu) for more information.