



GEOMETRY AND TOPOLOGY SEMINAR

Some structures on the joint moduli space of Higgs bundles

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Abstract. I will present recent joint work with Jérémie Toulisse and Richard Wentworth on a differential geometric construction of the joint moduli space of stable G-Higgs bundles over the Teichmuller space of a closed oriented surface. This joint moduli space has many interesting structures that are preserved by the mapping class group of the surface. In particular, I will discuss a surprising relationship between four key objects: the isomonodromic foliation, a canonical hermitian form arising from the Atiyah-Bott-Goldman symplectic structure on the character variety, a canonical holomorphic form which vertically lifts vector fields on Teichmuller space, and the energy function for equivariant harmonic maps.

FRIDAY, JANUARY 30

17H00

ONLINE (ZOOM): <https://fc-up-pt.zoom.us/j/88475153744>