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Mahmoud Zeinalian* (mzeinalian@liu.edu), Dept of Mathematics, LIU Post, 720 Northern Blvd, Brookville, NY 11548. *Poisson geometry and Fricke-Klein coordinates on the moduli of local systems*. Preliminary report.

Length of the hyperbolic geodesic in a given free homotopy class of closed curves on a surface defines a function on the deformation space of hyperbolic structures. Poisson bracket of two such functions is intimately related to the hyperbolic geometry of the surface in several ways, for example through Wolpert's cosine formula. This line of thinking has been extended to the study of the deformation space of local systems in increasing levels of generality. I will describe how this fits into the study of the (2-d)-shifted symplectic structure on the moduli of infinity local systems of perfect complexes on a d-dimensional closed and oriented manifold. (Received August 10, 2015)