

Abstract

A projective structure on a Riemann surface is determined by a holomorphic quadratic differential via the Schwarzian differential equation. In this talk we consider the space of projective structures on a punctured surface corresponding to quadratic differentials with poles of order three or more at the punctures. This admits a monodromy map to the moduli space of framed representations, that was defined by Fock and Goncharov. I shall discuss a recent result, in joint work with Mahan Mj, that characterizes the image of the monodromy map. This is an analogue of the theorem of Gallo-Kapovich-Marden for closed surfaces, and answers a question of Allegretti-Bridgeland.