1152-53-306 **Lorenzo Ruffoni*** (lruffoni@fsu.edu), Tallahassee, FL , and **Stefano Francaviglia**. *Moving branch points on complex projective structures.*

Complex projective structures are defined as $(\mathrm{PSL}_2\,\mathbb{C}, \mathbb{CP}^1)$-structures on surfaces. Hyperbolic structures are classical examples, so every Riemann surface of genus at least 2 admits a complex projective structure by uniformization. Vice versa such a structure induces in particular a complex structure on the surface. If we allow branch points (i.e. cone points of angle $2\pi k, k \in \mathbb{N}$), then these structures admit non-trivial holonomy-preserving deformations, which appear in positive-dimensional families. In this talk we will consider the problem of understanding whether the induced deformation of the underlying complex structure is trivial (per se, or at least infinitesimally), in terms of conditions on the collection of branch points. We will present some old and new result, and some motivating examples arising from a certain class of ODEs. This is joint work with S. Francaviglia. (Received September 06, 2019)