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Lorenzo Ruffoni* (lruffoni@fsu.edu) and **Stefano Francaviglia**. *Local deformations of branched projective structures: Schiffer variations and the Teichmüller map.*

We consider CP1-structures on closed surfaces of genus at least 2, which are geometric structures locally modelled on the geometry of Möbius transformations of the Riemann sphere. Every Riemann surface admits a CP1-structure by uniformization, and vice versa a CP1-structure induces a complex structure on the surface. In the unbranched case a CP1-structure is uniquely determined by the underlying complex structure together with a holonomy representation of the fundamental group into $\mathrm{PSL}(2, \mathbb{C})$. If we allow branch points, then these structures admit non-trivial holonomy-preserving deformations, and in this talk we consider the problem of understanding if the induced deformation of the underlying complex structure is trivial (per se, or at least infinitesimally), in terms of analytic conditions on the collection of branch points. This is joint work with S. Francaviglia. (Received January 08, 2020)