

1125-51-2385

**Ellie Dannenberg\***, MSCS Department UIC, 322 Science and Engineering Offices (MC 249), 851 S Morgan St, Chicago, IL 60607. *Circle Packings on Surfaces with Complex Projective Structures*.

The classical circle packing theorem of Koebe, Andreev, and Thurston says that given a triangulation  $\tau$  of a closed, orientable surface, there is a unique constant curvature metric on the surface so that the surface with this metric admits a circle packing with dual graph  $\tau$ . Circles are also key objects in studying complex projective surfaces. Kojima, Mizushima, and Tan give a definition of a circle packing on such a surface. Unlike in the metric case, there is a deformation space of complex projective circle packings with combinatorics given by  $\tau$ . This space is parametrized by cross ratio type coordinates. Kojima, Mizushima, and Tan describe this space in the case where  $\tau$  has 1 vertex. I expand some of their results to classes of higher vertex triangulations. (Received September 20, 2016)