

## Graduate Student Colloquium

### *Circle Packings and Complex Projective Surfaces*

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**Abstract:** The Koebe-Andreiev-Thurston Circle Packing Theorem says that given a triangulation  $\tau$  of a surface  $S$ , there is a unique pair  $(g, P)$ , where  $g$  is a constant curvature Riemannian Metric on  $S$ .  $P$  is a circle packing of circles with respect to  $g$  and combinatorics given by  $\tau$ . If, instead of constant curvature Riemannian metrics on  $S$ , we consider complex projective structures on  $S$ , there is a deformation space of complex projective circle packings with fixed combinatorics.

In this talk, I'll discuss circle packings and complex projective structures on surfaces. I'll then discuss the deformation space of complex projective circle packings with combinatorics given by  $\tau$ . Much is still unknown about this space.

Monday, October 24 at 1:00 PM in SEO 636