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Circle Packings, Welding Operations, and Applications

We will discuss various welding operations in the plane and on Riemann surfaces and their circle packing analogues. For example, circle packings can be used to approximate classical quasisymmetric welding, such as arises in the work of Radnell and Schippers in string theory. We will also consider other welding-type deformations included Thurston's earthquakes and McMullen's complex earthquakes.

This is joint work with Roger Barnard, J'Lee Bumpus, and Eric Murphy.