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Satyan L Devadoss* (satyan.devadoss@williams.edu). *Point Configurations and Coxeter Operads*. Preliminary report.

The minimal blow-ups of simplicial Coxeter complexes are natural generalizations of the real moduli space of Riemann spheres. They inherit a tiling by the graph-associahedra convex polytopes. We obtain explicit configuration space models for the classical infinite families of finite and affine Weyl groups $(A, B, D, \tilde{A}, \tilde{B}, \tilde{C}, \tilde{D})$ using particles on lines and circles. A Fulton-MacPherson compactification of these spaces is described and this is used to define a *Coxeter operad*. (Received September 02, 2005)