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Brittany Burdette* (beburd@uab.edu) and **Cameron Hale**. *Correspondence Between Unicritical and Maximally Critical Laminations of Degree d .*

A lamination of the unit disk consists of a collection of non-crossing leaves and polygons invariant under the angle d -tupling map on the circle. Laminations model Julia sets of complex polynomials. The purpose of this research is to establish the correspondence between unicritical rotational polygons and maximally multicritical rotational polygons in a lamination. In this case, the single criticality in the unicritical situation splits into the maximal number of criticalities possible. The process of breaking the criticality uses the co-roots of the major (longest leaf) which are points, other than the endpoints of the polygons, in the boundary of the central gap of the lamination that is fixed under the first return map. When starting with the maximally multicritical rotational polygons, we describe the subset which can correspond back to unicritical: the majors of the rotational polygon must be in consecutive order. This relationship aids in understanding the boundary of the principle hyperbolic component (PHC) of the parameter space of degree d polynomials. In the PHC, all of the critical points of the polynomial are attracted to an attractive fixed point. (Received September 19, 2021)