The product of two simplices can be triangulated by non-crossing trees. With Lilla Tóthmérész we found a generalization of this fact: the root polytope of an arbitrary bipartite graph has a dissection by a simple class of spanning trees derived from a given ribbon structure. Moreover, the dissection comes with a natural shelling order. We proved that the resulting $h$-vector is equivalent to

(a) the Ehrhart polynomial of the root polytope and thus, by earlier joint work with Alex Postnikov, to the common interior polynomial of the two hypergraphs induced by the bipartite graph

(b) a new variant of the interior polynomial, defined using the ribbon structure along the lines of Bernardi’s approach to the Tutte polynomial.

Hence we obtain a Bernardi-type definition of the interior polynomial. (Received January 22, 2019)