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Lisa Berry and **Devadoss Satyan** (lforcey@gmail.com), Akron, OH 44313, and **Stefan Forcey*** (sforcey@uakron.edu), **Stephen Reisdorff** and **Patrick Showers**. *Poset polytopes and some conjectured tree polytopes.*

I'll define and give examples of how a new simple polytope can be associated to every poset. The facets of this polytope are certain connected lower sets (order ideals). Special cases give many famous polytopes and new ways to construct them: associahedra, cyclohedra, and all the other graph-associahedra arise from new truncations on product polytopes. Nestohedra and hypergraph-associahedra are also generated, as well as new polytopes not in any of those categories. Recently we proved that three sequences of painted-tree polytopes were actually equivalent to graph-associahedra for fans and stars, yielding new ways of illustrating products in the painted-tree algebras. That leaves open the conjecture that another four such sequences are also polytopal. (Received August 07, 2015)