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Alex Fink* (a.fink@qmul.ac.uk). *Ladder ideals and tropical hyperplane arrangements with infinities.*

Much of the combinatorics of tropical hyperplane arrangements, that relate them to triangulations of products of two simplices and other well-known objects, has previously been exhibited only when each hyperplane is normal to the full simplex, but remains valid if faces of that simplex are allowed. Several of these appear in joint work with Rincon, *Stiefel tropical linear spaces*. Another, featured in ongoing work with Dochtermann and Sanyal, is that they yield cellular resolutions of ladder determinantal ideals. We discuss both, along with extensions in progress to broader classes of ideals related to generalised permutahedra. (Received September 13, 2015)