1135-VO-1683 Yoav Len* (yoav.len@uwaterloo.ca). Curves, graphs, and tangent lines.

I will discuss applications of tropical geometry to enumerative problems involving tangency conditions. I will explain how to associate a graph to an algebraic curve, in a way that encodes many of its geometric properties. Using appropriate lifting theorems, statements about intersections of curves can be reformulated in terms of combinatorial problems on graphs. As I will show, such techniques can be used to count bitangent lines to curves, and uncover combinatorial aspects of projective dual curves. (Received September 24, 2017)