Alex Fink* (a.fink@qmul.ac.uk), David E Speyer and Alexander Woo. A Gröbner basis for the graph of the reciprocal plane.

Two different-looking commutative algebraic ways to get the characteristic polynomial of a hyperplane arrangement appear in the literature: from the K-polynomial of the reciprocal plane (Orlik-Terao), and from the multidegree of the graph over this plane (Adiprasito-Huh-Katz). We give a Stanley-Reisner initial degeneration explaining why these two are not different after all. (Received February 28, 2017)