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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 to an extension of the no broken circuit complex explaining why these two are not different after all. (Received July 17, 2017)