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Rebecca Patrias*, patri080@umn.edu, and **Pavlo Pylyavskyy**. *Dual filtered graphs and K -theoretic combinatorial Hopf algebras.*

Using the Hecke insertion algorithm of Buch-Kresh-Shimozono-Tamvakis-Yong, we define a K -theoretic analogue of Fomin's dual graded graphs called dual filtered graphs. The key formula in the definition is $DU - UD = D + I$. We discuss two main constructions of dual filtered graphs: the Mobius construction, which corresponds to natural insertion algorithms, and the Pieri construction, which is an algebraic construction. The main examples in this talk stem from the K -theoretic combinatorial Hopf algebras of Lam and Pylyavskyy. (Received August 06, 2015)