1054-17-198   **Karel Casteels*** (`kcasteel@sfu.ca`), Dept of Math, Simon Fraser University, 8888 University Drive, Burnaby, BC V5A 1S6, Canada. *Finding generators of H-prime ideals in $O_q(M_{m,n}(C))$ using graph theory.*

Launois has shown that every $\mathcal{H}$-prime ideal in $O_q(M_{m,n}(\mathbb{C}))$ has a generating set consisting of quantum minors and has given an algorithm to find them.

We modify an old method of Lindstrom and Gessel-Viennot to show that Launois' algorithm is equivalent to finding sets of disjoint paths on the Cauchon diagram associated with the $\mathcal{H}$-prime in question. (Received September 14, 2009)