1057-08-326 Karel Casteels* (kcasteel@sfu.ca), Jason Bell and Stephane Launois. On the dimension of H-strata in quantum matrices.

We consider the prime spectrum of the algebra of quantum matrices. Goodearl and Letzter's \mathcal{H} -stratification theory has proven to be a useful tool, and in this talk we discuss the dimensions of the \mathcal{H} -strata. In particular, we give a surprisingly easy method to determine the dimension. This procedure is based on deriving a certain permutation from a combinatorial object known as a Cauchon diagram. (Received January 25, 2010)