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Monica Vazirani* (vazirani@math.ucdavis.edu), UC Davis, Department of Mathematics, One Shields Ave, Davis, CA 95616-8633. *A Hecke theoretic shadow of tensoring the crystal of the basic representation with a level 1 perfect crystal.*

The irreducible representations of the symmetric group S_n are parameterized by partitions of n . One can use the partition, viewed as being built up row by row, to construct the module algebraically, piece by piece.

Over a field of characteristic p , the irreducible representations of S_n are parameterized by the “ p -regular” partitions.

However, the analogous construction of these modules fails. We give an alternate (algebraic) construction of the modules, motivated by viewing the crystal of the basic representation of $\widehat{\mathfrak{sl}}_p$ as a limit of tensor products of level 1 perfect crystals. This construction relies on the theorem of Grojnowski relating the crystal of the basic representation to the simple S_n -modules and their behavior under restriction to S_{n-1} . (Received September 09, 2006)