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Catalin Zara*, Department of Mathematics, University of Massachusetts Boston, 100 Morrissey Blvd., Boston, MA 02125. *Strong Equivalence of Three Definitions of the Bruhat Order and Consequences for the Equivariant Cohomology of Flag Manifolds.*

Three well-known definitions of the Bruhat order on the symmetric group S_n are based on ascending chains, subwords, and comparison of matrices, respectively. We express the last using fillings of tableaux, and show that the three equivalent conditions are satisfied *in the same number of ways*. We then discuss how this result contributes to the reconciliation of two methods of constructing generators for the equivariant cohomology of a flag manifold: divided differences and normalized Morse interpolation. (Received September 06, 2006)