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John McCleary (mccleary@vassar.edu), **Matthew S Miller*** (mamiller@vassar.edu) and
Max Wakefield (wakefiel@usna.edu). *A monoidal structure on the set of diagonal subspaces.*

In a classic paper from the 1960's Milgram used the bar construction of an H-space to calculate the homology of certain symmetric products. Our recent work, inspired by these classical methods, takes advantage of a monoidal structure on the set of diagonal subspaces in an effort to better understand the topology, particularly the cohomology, of certain classes of subspace arrangements. In this talk we will describe some of our constructions, results, and other information we hope to obtain by these methods. (Received February 14, 2011)