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Trevor McGuire* (trevor.mcguire@ndsu.edu). *Join-preserving embeddings of discrete posets.*

The work of Dushnik and Miller in the 1940s gives us a nice way to embed posets into \mathbb{Z}^n , and the minimal value of n is now called the dimension of a poset. However, these embeddings do not preserve many desirable properties of posets. In this talk, we will examine one way in which we can modify the Dushnik-Miller embedding into a join-preserving embedding. The same technique may be used to preserve other properties, as well. We will discuss what properties the poset must have in order for this modification to work. (Received February 22, 2016)