An instance $I$ of the Stable Marriage Problem consists of a finite bipartite graph, $G = (M \cup W, E)$, where each vertex has preferences in the form of a linear order over its neighbors. The goal is to find a matching $\mu$ which is stable in the sense that no pair $(m, w) \in E$ mutually prefer each other to their partners in $\mu$. In their seminal work, Gale and Shapley prove that such a stable matching exists for any instance $I$.

The set of all stable matchings forms a distributive lattice, which can be realized as the lattice of order ideals of the rotation poset $\Pi(I)$. We prove that even if $G$ is restricted to have maximum degree 3, given any finite poset $\mathcal{P}$, one can efficiently construct an instance $I$ such that $\Pi(I) \simeq \mathcal{P}$. Thus, the distributive lattice of stable matchings can be arbitrary for bounded degree graphs. Our construction—which extends a classical result of Irving and Leather—has applications to computational complexity and economics. (Received September 22, 2015)