Lower bound graphs of lattices and lattice transformations

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McMorris and Zaslavsky introduced the *LB-graph* of a poset $P = (X, \leq)$, which is the simple graph $G = (X, E)$ with a vertex set X and an edge $uv \in E$ if and only if there exists $x \in X$ such that $x \leq u, v$. We say that a graph G is an *LB-graph* if there exists a poset whose LB-graph is isomorphic to G. McMorris and Zaslavsky also obtained a characterization of an LB-graph. In my talk, by replacing a poset with a lattice, we consider a characterization of an LB-graph, and mention its related problem.

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