Piotr J. Wojciechowski, Jennifer Del Valle, and Vladik Kreinovich,
"Feasible algorithms for lattice and directed subspaces"

In some practical situations it is important to check whether a
given linear subspace of a vector-lattice is a lattice. In
financial applications, it was proven by Abramovich et al. (J. of
Economic Dynamics & Control 2000) that the existence of appropriate
minimum-cost insured portfolios is equivalent to the fact that the
linear space generated by the corresponding financial instruments
is lattice-ordered. In the talk we present feasible,
polynomial-time, algorithms for solving the problem. Some
generalizations and future applications will be discussed.