Lokendra P Paudel* (lokendra@nmsu.edu), New Mexico State University, Las Cruces, NM 88001. The Group of Divisibility of a Finite Intersection of Valuation Rings.

The group of divisibility of an integral domain is the multiplicative group of nonzero principal fractional ideals of the domain. The goal of this presentation is to describe the lattice-ordered groups (ℓ-groups) that occur as a group of divisibility of an intersection of finitely many valuation overrings of the domain $D = k[x_1, x_2, ..., x_n]$, where $k$ is a field and $x_1, x_2, ..., x_n$ are indeterminates for $k$. (Received September 07, 2014)