

1124-13-84

Evan Houston* (eghousto@uncc.edu), **Eun Kyung Lee** (eklee@cau.ac.kr) and **Mi Hee Park** (mhpark@cau.ac.kr). *Locally pseudo-valuation domains with only finitely many star operations.*

Recall that a pseudo-valuation domain (PVD) is a local domain (R, M) such that $(M : M)$ is a valuation domain with maximal ideal M . Park (2012) characterized PVDs having only finitely many star operations. The notion of PVD was globalized in two ways by Dobbs and Fontana (1983). In the simpler of these, a domain R is an LPVD (locally PVD) if each localization at a maximal ideal is a PVD. In this talk we characterize LPVDs admitting only finitely many star operations, and we give examples to illustrate some of the subtleties involved. (We also characterize globalized PVDs, the other Dobbs-Fontana extension of “PVD,” with only finitely many star operations.) Many of the techniques come from the characterization of integrally closed domains having only finitely many star operations by Houston, Mimouni, and Park (2014). (Received August 30, 2016)