

1015-13-292

Steven Dale Cutkosky* (cutkoskys@missouri.edu), Department of Mathematics, University of Missouri, Columbia, MO 65211. *Eigenvaluations*.

Let $f : R \rightarrow R$ be a homomorphism of local domains. We investigate conditions under which there exist a valuation ring V of the quotient field of R such that $f^{-1}(V) = V$. The concept of eigenvaluations was introduced by Farrel and Jonsson for $R = C[[x, y]]$, the power series ring in two variables over the complex numbers. (Received February 07, 2006)