1015-13-292   **Steven Dale Cutkosky*** (`cutkoskys@missouri.edu`), Department of Mathematics, University of Missouri, Columbia, MO 65211. *Eigenvaluations.*

Let $f : R \to R$ 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)