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Steven Dale Cutkosky* (cutkoskys@missouri.edu), Department of Mathematics, University of Missouri, Columbia, MO 65211. *The completion of a local ring with respect to a valuation.* Preliminary report.

Suppose that R is a local domain with maximal ideal m and quotient field K , and ν is a valuation of K which dominates R . We consider the construction of a prime ideal P in the m -adic completion \hat{R} of R such that there is an extension of ν to \hat{R}/P which has the same rank as ν . (Received September 20, 2005)