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Title:	On prolongations of valuations via newton polygons and liftings of polynomials
Authors:	Khanduja, S.K. (/jspui/browse?type=author&value=Khanduja%2C+S.K.)
Keywords:	Valued fields Non-Archimedean valued fields
Issue Date:	2012
Publisher:	Elsevier B.V
Citation:	Journal of Pure and Applied Algebra, 216 (12), 2648-2656.
Abstract:	Let $v$ be a real valuation of a field $K$ with valuation ring $R_v$ . Let $K(\theta)$ be a finite separable extension of $K$ with $\theta$ integral over $R_v$ and $F(x)$ be the minimal polynomial of $\theta$ over $K$ . Using Newton polygons and residually transcendental prolongations of $v$ to a simple transcendental extension $K(x)$ of $K$ together with liftings with respect to such prolongations, we describe a method to determine all prolongations of $v$ to $K(\theta)$ along with their residual degrees and ramification indices over $v$ . We give an analogue of Ore's Theorem when the base field is an arbitrary rank-1 valued field which extends the main result of [Mathematika, 47 (2000), 173--196].
Description:	Only IISERM authors are available in the record.
URI:	<a href="http://www.sciencedirect.com/science/article/pii/S0022404912001223">http://www.sciencedirect.com/science/article/pii/S0022404912001223</a> ( <a href="http://www.sciencedirect.com/science/article/pii/S0022404912001223">http://www.sciencedirect.com/science/article/pii/S0022404912001223</a> ) <a href="http://dx.doi.org/10.1016/j.jpaa.2012.03.034">http://dx.doi.org/10.1016/j.jpaa.2012.03.034</a> , ( <a href="http://dx.doi.org/10.1016/j.jpaa.2012.03.034">http://dx.doi.org/10.1016/j.jpaa.2012.03.034</a> .)
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