

PROPOSITION A. *Let V be a valuation ring having a proper prime ideal P which is not branched; then $P = \bigcup_{\lambda \in \Lambda} M_\lambda$, where $\{M_\lambda\}_{\lambda \in \Lambda}$ is the collection of prime ideals of V which are properly contained in P . In this case, $P \cdot V[[X]] = P[[X]]$ if and only if (*) given any countable subcollection $\{M_{\lambda_i}\}$ of $\{M_\lambda\}$, $\bigcup_{i=1}^{\infty} M_{\lambda_i} \subset P$.*

Proof. Assuming (*), let $f(X) = \sum_{i=0}^{\infty} f_i X^i \in P[[X]]$. For each i , $f_i \in M_{\bar{\lambda}_i}$ for some $\bar{\lambda}_i \in \Lambda$. Let $p \in P$, $p \notin \bigcup_{i=0}^{\infty} M_{\bar{\lambda}_i}$; since $p \notin M_{\bar{\lambda}_i}$, it follows that $f_i \in M_{\bar{\lambda}_i} \subseteq (p)V$ for each i and $f(X) \in (p)V[[X]] \subseteq P \cdot V[[X]]$.

Conversely, assuming that (*) fails, let $\{M_{\lambda_i}\}_{i=1}^{\infty}$ be a countable subcollection of $\{M_\lambda\}_{\lambda \in \Lambda}$ such that $\bigcup_{i=1}^{\infty} M_{\lambda_i} = P$. By extracting a subsequence of $\{M_{\lambda_i}\}$, we may assume that $M_{\lambda_i} \subset M_{\lambda_{i+1}}$ for each i . Let $f_i \in M_{\lambda_{i+1}}$, $f_i \notin M_{\lambda_i}$ and let $f(X) = \sum_{i=1}^{\infty} f_i X^i$; then $f(X) \in P[[X]]$ but $f(X) \notin P \cdot V[[X]]$.

MARSHALL UNIVERSITY

Correction to

COHOMOLOGY OF FINITELY PRESENTED GROUPS

P. M. CURRAN

Volume 42 (1972), 615-620

In the second paragraph of the abstract, p. 615, the first sentence, "If G is generated by n elements, \dots " should read "If G is a residually finite group generated by n elements, \dots ".

Correction to

COMMUTANTS OF SOME HAUSDORFF MATRICES

B. E. RHOADES

Volume 42 (1973), 715-719

In [2] it is shown that, for A a conservative triangle, B a matrix with finite norm commuting with A , B is triangular if and only if

(1) for each $t \in l$ and each n , $t(A - a_{nn}I) = 0$ implies t belongs to the linear span of (e_0, e_1, \dots, e_n) . On page 716 of [2] it is asserted that

(2) $(U^*)^{n+1}(A - a_{nn}I)U^{n+1}$ of type M for each n is equivalent to