

Families of sets whose pairwise intersections have prescribed cardinals or order types

Corrigenda

BY P. ERDÖS, E. C. MILNER AND R. RADO

The University of Calgary, Canada and The University of Reading, England

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(i) J. Baumgartner has kindly drawn our attention to the fact that Theorem 2 as stated in (1) is false. A counter example is the case in which $m = \aleph_2$; $n = \aleph_1$; $p = \aleph_0$. For by reference (3) of the paper (1) there is an almost disjoint family $(A_\gamma: \gamma < \omega_1)$ of infinite subsets of ω . Put $A_\nu = \omega$ for $\omega_1 \leq \nu < \omega_2$. Then, contrary to the assertion of that theorem, all conditions of Theorem 2 are satisfied. However, Theorem 2 becomes correct if the hypothesis

$$(1) \quad cf m \neq p^+; \quad m > n; \quad m > p^+$$

is strengthened to

$$(2) \quad cf m \neq p^+; \quad m > n > p^+.$$

In fact, Baumgartner has proved the desired conclusion under the weaker hypothesis

$$cf m \neq p^+; \quad m \geq n > p^+.$$

In our attempt at proving Theorem 2 under the hypothesis (1) an error occurred towards the end of Case 1, p. 219, where the existence of μ_1 and μ_2 cannot, as claimed, be inferred. Under the hypothesis (2) a correct proof is obtained by changing p. 219, line 19, of (1) to

‘Since $|\{A_\mu \cap A_{\rho_0}: \mu \notin N_0\}| \leq 2^{|S_0|} < n$, etc.’

(ii) Correction of a misprint: The last relation on page 219, line 23, should read $|N(p)| > p$.

REFERENCE

(1) Families of sets whose pairwise intersections have prescribed cardinals or order types. *Math. Proc. Cambridge Philos. Soc.* 80 (1976), 215-221.