

**Corrigenda to the paper  
“On the rank of the intersection of subgroups of a Fuchsian group”**

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The paper in question appeared on pp. 165–187 of *Proc. Second Internat. Conf. Theory of Groups*, Canberra 1973, ed. by M. F. Newman, Lecture Notes in Math. **372**, (Springer-Verlag, Berlin Heidelberg New York, 1974). It purported to give an upper bound, in terms of  $m$  and  $n$  alone, for the rank of the intersection of two subgroups of ranks  $m$  and  $n$  in a Fuchsian group. This is an announcement only, of errors, some serious, in that paper. The errors have been corrected and a corrected version may eventually be published; in the meantime, full details of the corrections may be obtained from the author. The latter hereby thanks Dr D. E. Cohen for pointing out some of the errors. In what follows, the page and reference numbers are as in that paper, and so is the notation.

Page 165, first line.  $LF(2, \mathbf{R})$  is not, as stated,  $SL(2, \mathbf{R})$ , but isomorphic to  $PSL(2, \mathbf{R})$ .

Page 166, part (i) of Theorem 1.1 and line 15 from the bottom. The paper [16] has been corrected: the rank of a Fuchsian group is at least  $n + t - 2$ . Hence a version of part (i) of Theorem 1.1 holds without the condition  $t = 0$ .

Page 166, last line. One also needs that not both  $n = 1$  and  $t = 1$ .

Section 3. The proof of Theorem 3.1 is fallacious, and that theorem is to be replaced by a different, less precise analogue of the ‘Howson—Hanna Neumann formula’. Thus all of Section 3 from line 17 of page 170 needs to be replaced.

Section 4. Corollary 4.4 is no longer required. Corollary 4.5 is to be replaced since its proof is fallacious. The collapse of Theorem 3.1 entails that of Corollary 4.6, which therefore yields to a weaker result (which now replaces part (ii) of Theorem 1.1).

Section 5. Theorem 5.1 needs to be changed in the light of the above. In Corollary 5.3 one has in fact: (i)  $\gamma = \alpha + \beta - 1$ ; and (ii)  $\gamma = \alpha$ .

Once the corrections and resulting changes have been made, the bound in the corrected version of part (iii) of Theorem 1.1 can be computed as on pages 181, 182, yielding a polynomial of degree 8 in  $m$  and  $n$ .