

## ERRATA

Correction to

### A DESCRIPTION OF $\text{MULT}_i(A^1, \dots, A^n)$ BY GENERATORS AND RELATIONS

THOMAS W. HUNGERFORD

Volume 16 (1966), 61-76

The statement in the first sentence that  $\otimes$  always means  $\otimes_R$  is incorrect. The general rule for reading the paper is this: in any statement involving the tensor product of more than two modules or chain complexes, such as  $A^1 \otimes \dots \otimes A^n$  or  $K^1 \otimes \dots \otimes K^r$ ,  $\otimes$  means  $\otimes_R$ . In any statement involving the tensor product of two finitely generated free complexes of length  $i$  (as in the definition of the generators),  $\otimes$  means  $\otimes_{\mathbb{Z}}$ . If this is kept in mind, the few exceptions will be clear in context.

In lines 4 and 8 on page 62 “bimodule” should read “module”. In the definition of the generators, the complexes  $E^r$  for  $r$  odd [even] are complexes of length  $i$  of finitely generated free right [left]  $R$ -modules.  $u(1)$  [ $u(n)$ ] is a right [left]  $R$ -module map and  $u(r, r+1)$  is a map of  $R$ -bimodules.

Correction to

### ON A STRONGER VERSION OF WALLIS' FORMULA

V. R. RAO UPPULURI

Volume 19 (1966), 183-187

The note by Boyd [1] has led the author to go through the computations in finding the Bhattacharya bounds and the following corrections should be made in [2].

The results on page 186 of [2] should be corrected as follows:

$$S_1 = (Y - n)/\sigma \quad \text{where } Y = \sum_{i=1}^n (X_i^2/\sigma^2)$$

$$S_2 = \{(Y - n)^2 - 3(Y - n) - 2n\}/\sigma^2$$

$$\lambda_{11} = 2n/\sigma^2, \quad \lambda_{12} = \lambda_{21} = 2n/\sigma^3$$

$$\lambda_{22} = 2n(4n + 9)/\sigma^4 .$$

$\sigma_T^2 > L_2$  implies:

$$(4) \quad \left\{ \frac{n}{2} \frac{\Gamma^2\left(\frac{n}{2}\right)}{\Gamma^2\left(\frac{n+1}{2}\right)} - 1 \right\} \sigma^2 > \frac{\sigma^2}{2n} \frac{4n+9}{4n+8},$$

for  $n = 1, 2, \dots$ .For  $n = 2m$ , (4) may be written as:

$$(5) \quad \frac{\Gamma^2(m+1)}{\Gamma^2\left(m + \frac{1}{2}\right)} > m + \frac{1}{4} + \frac{1}{32m+32}$$

for  $m = 1, 2, \dots$ .and for  $n = 2m + 1$ , (4) may be written as:

$$(6) \quad \frac{\Gamma^2(m+1)}{\Gamma^2\left(m + \frac{1}{2}\right)} < \frac{\left(m + \frac{1}{2}\right)^2}{m + \frac{3}{4} + \frac{1}{32m+48}}$$

for  $m = 1, 2, \dots$ .

Thus (5) and (6) taken together prove

$$(7) \quad \left\{ m + \frac{1}{4} + \frac{1}{32m+32} \right\}^{1/2} < \frac{\Gamma(m+1)}{\Gamma\left(m + \frac{1}{2}\right)} < \left\{ \frac{\left(m + \frac{1}{2}\right)^2}{m + \frac{3}{4} + \frac{1}{32m+48}} \right\}^{1/2},$$

which also agrees with the result of Boyd [1]. Equation (3) of [2] has to be replaced by equation (7) of this note.

## REFERENCES

1. A. V. Boyd, *Note on a paper by Uppuluri*, Pacific J. Math. **22** (1967), 9-10.
2. V. R. Rao Uppuluri, *On a stronger version of Wallis' formula*, Pacific J. Math. **19** (1966), 183-187.

Correction to

## MAPPINGS AND SPACES

TAKESI ISIWATA

Volume 20 (1967), 455-480

 $(A \implies B: A \text{ should read } B)$ p. 459 line 26 in containing  $y_n \implies$  containing  $y_n$  in