ERRATA

On the computation of Mathieu functions

by the Group "NUMERICAL ANALYSIS" at Delft University of Technology
(Journal of Engineering Mathematics, 7 (1973) 39–61)

In this paper some misprints occur, of which at least one is a serious error. A list of known misprints is given below:

Page 40 formula 4c should read:

$$Ms^{(j)}_{2r}(z, q) = \sum_{k=1}^{\infty} (-1)^{k+r} B^{(2r)}_{2k} \{J_{k-s}(u_1) Z^{(j)}_{k+s}(u_2) - J_{k+s}(u_1) Z^{(j)}_{k-s}(u_2)\} / B^{(2r)}_{2s} \qquad (4c)$$

Page 48 line 3 should read:

```
w: = 2 * order + 1; w2: = w * w;
```

Page 54 line 24 should read:

```
Y: = H * (Q * HC + P * HS);
```

Page 54 line 40 should read:

```
A[14]: = −0.00046 06261 66206 3;
```

Page 55 line 40 should read:

```
value c, x; integer c; real x, j, y; label alarm;
```

Page 55 line 44 should read:

```
begin real p, q, h, hc, hs; array a[0:30];
```

Page 56 lines 51 and 52 should read:

```
h: = 0.79788 45608 02865 4 / sqrt(x);
j: = h * (p * hc − q * hs);
```

Page 58 lines 31–32 should read:

```
comment  5 * 10^-11 is the relative accuracy of the i.c.l. 1905 computer;
for m: = mstar − 1 step −1 until nmax do p: = 1/(m * a − p);
begin array g[k + 1:nmax]; g[nmax]: = p;
```

This error can be serious in the computation of Bessel functions.

Page 57 line 7 should read:

```
a[4]: = 1.28799 40988 57677 6;
```

Page 59 lines 21–22 should read:

j, z[−order/2+0.1: kmax+order/2+1.9]: j[k] = $J_k(\sqrt{q}\,e^{-x})$
z[k] = $J_k(\sqrt{q}\,e^{x})$ or $Y_k(\sqrt{q}\,e^{x})$

Page 60 line 5 should read:

sin(kx) = sin((k−1)x) cos(x)+cos((k−1)x) sin(x)

Page 60 line 11 should read:

si[k]: = si[k−1] * co[1]+co[k−1] * si[1]; end k;

Page 60 line 24 should read:

if no = 4 then begin ez: = exp(x); u1: = h/ez; u2: = h * ez end;

All these errors are due to incorrect copying of our original programs. Therefore our claim of accuracy in our results is not affected by them.