

## CORRECTION TO "SINGULARITIES OF A SIMPLE ELLIPTIC OPERATOR"

H. P. McKEAN

B. Ruf of the Università di Milano has pointed out that the evaluation  $ZI_{n+1} = 1$  on p. 161, line 25 is wrong. The proof that each of the loci  $L_n$  ( $n = 1, 2, 3, \dots$ ) is nonvoid and connected then falls apart, though it is easy to check it by other methods for  $n = 1, 2$ , and  $3$ . This failure means that the map  $f \rightarrow -f'' + f^2/2$  may have the predicted singularities with normal form

$$x \rightarrow (x_1 x_2 = x_1^2 x_3 \cdots + x_1^{n-1} x_n + x_1^{n+1}, x_2, x_3, \dots)$$

(fold, cusp, swallow-tail, etc.) only up to a certain degree  $n \geq 3$ —and then *stop*, whereas my claim had been that they are presented in every degree without exception. I do not see how to repair this blunder except in very low degree, by trial and error.

### References

- [1] H. P. McKean, *Singularities of a simple elliptic operator*, J. Differential Geometry **25** (1987) 157–165.

