Erratum

On the Determinant of Elliptic Differential and Finite Difference Operators in Vector Bundles over S^1

D. Burghelea¹, L. Friedlander², and Th. Kappeler³

- ¹ Department of Mathematics, Ohio State University, Columbus, OH 43210-1174, USA
- ² Department of Mathematics, University of California, Los Angeles, CA 90024, USA
- Department of Mathematics, Brown University, Providence, RI 02912, USA

Received August 18, 1992

Commun. Math. Phys. 138, 1-18 (1991)

On page 9, lines 6 and 9 from below: instead of

$$\frac{d}{ds}\left.(\zeta_{Q,A,\theta}(s)-\zeta_{Q,A',\theta}(s))\right|_{s=0}$$

should be

$$(\zeta_{Q,A,\theta}(s) - \zeta_{Q,A',\theta}(s))\big|_{s=0}.$$

On page 17. Corollary 5.3, 2) as stated is incorrect. It should be replaced by **Corollary 5.3.** 2) $(S_{\theta}(A))^2$ is a spectral invariant.

Proof. Since A is of odd order, $S_{\theta}(A) = -1/S_{\theta+\pi}(A)$. Theorem 1 implies

$$\frac{\mathrm{Det}_{\theta}A}{\mathrm{Det}_{\theta+\pi}}\,A = -\,S_{\theta}(A)^2\,.$$

Observation. The example of the family of operators A(k) = id/dx + k, k integer, shows that neither R(A) nor $S_{\theta}(A)$ are spectral invariants.

Communicated by A. Jaffe