

Errata

Erratum to the paper *F.S. Rofe-Beketov "Operator-Theoretical Proof of the Arnold Alternation Theorem and its Generalization"*(*Mat. Fiz. Anal. Geom.*, **12** (2005), No. 1, 119 – 125. (Russian))

The proof of Theorem 2 in the author's paper [1] requires partial refinement. Namely, the concluding part of the proof of Theorem 2, starting from the point where the new spectral parameter μ is introduced (p. 122), is to be replaced as follows:

With $\cos B = 0$, Theorem 2 becomes identical to Theorem 1.1 from the monographs [2, 3]. In the general case, the proof of Theorem 2 goes similarly to that of Theorem 1.1 from [2, 3], applying analogs of Lemmas 1.1, 1.2, and that of Theorem 1.3 from [2, 3] to $Y[x, \lambda, B]$ instead of $Y(x, \lambda)$. Those analogs are established under assumptions of Theorem 2 with formula (14) from [1] applied to h_a . Here h_a is a self-adjoint operator in the closure of its domain $D(h_a)$. Suitable analogs of Lemmas 1.1, 1.2, and that of Theorem 1.3 from [2, 3], under assumptions of Theorem 2 for h_a , have been established, after the author's hint, by A.M. Kholkin. With this refined proof, the formulation of Theorem 2 from [1] remains intact. (See also Proposition 1.1 of [3], p. 4).

References

- [1] *F.S. Rofe-Beketov*, Operator-Theoretical Proof of the Arnold Alternation Theorem and its Generalization. — *Mat. Fiz. Anal. Geom.* **12** (2005), No. 1, 119–125. (Russian)
- [2] *F.S. Rofe-Beketov and A.M. Kholkin*, Spectral Analysis of Differential Operators. A Relation Between Spectral and Oscillatory Properties. **332**, PSTU, Mariupol, 2001. (Russian)
- [3] *F.S. Rofe-Beketov and A.M. Kholkin*, Spectral Analysis of Differential Operators. Interplay Between Spectral and Oscillatory Properties. xxiii+438 pp., World Scientific, New Jersey-London-Singapore-Beijing-Shanghai-Hong Kong-Taipei-Chennai, 2005.