Addendum

Addendum: Solvability for some fourth order two-point boundary value problems

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The authors wish to make the following corrections to this paper:

The authors were unaware that the main results of this paper were already proved in the paper [1]:

Webb, J. R. L.; Infante, Gennaro; Franco, Daniel; Positive solutions of nonlinear fourth-order boundary-value problems with local and non-local boundary conditions. Proc. Roy. Soc. Edinburgh Sect. A, 138 (2008), 427–446.

In particular Theorem 3.1 was proved there and the exact value of the eigenvalue was found (as the fourth power of the smallest positive solution of $\cos(x)\cosh(x)=1$, typo corrected), and its approximate value 500.5639 was given there.

The differences in our paper [2] are that we use Laplace transforms to find the Green's function, our proof of Theorem 3.1 is different, and we use the Ritz-Method to find the approximate value of the eigenvalue.

We acknowledge the priority of the Webb, Infante, Franco paper and apologize to them for overlooking their paper.

Conflict of interest

The authors declare no conflict of interest in this paper.

References

1. J. R. L. Webb, G. Infante, D. Franco, Positive solutions of nonlinear fourth-order boundary-value problems with local and non-local boundary conditions, *Proc. Roy. Soc. Edinburgh Sect. A,* **138** (2008), 427–446.
2. Z. Bai, W. Lian, Y. Wei, S. Sun, Solvability for some fourth order two-point boundary value problems, AIMS Math., **5** (2020), 4983–4994.