

THE ORDER OF MAGNITUDE FOR HAUSDORFF AND NÖRLUND SUMMABILITY OF AN ORTHOGONAL SERIES

K. KALAIVANI AND G. P. YOUVARAJ

Abstract. In this paper, we estimate the order of magnitude for Hausdorff and Nörlund summability of an orthogonal series.

Mathematics subject classification (2010): Primary 40G05; Secondary 40A05.

Keywords and phrases: Hausdorff summability, Cesàro summability, Hölder summability matrix.

REFERENCES

- [1] G. ALEXITS, *Convergence problems of orthogonal series*, Pregamon, Oxford and New York, 1961.
- [2] H. RADEMACHER, *Einige Sätze über Reihen von allgemeinen Orthogonalfunktionen*, Math. Annalen **87** (1922), 112–138.
- [3] K. KALAIVANI AND G. P. YOUVARAJ, *Generalized Absolute Hausdorff summability of orthogonal series*, Acta Math. Hung. **140**, 1–2 (2013), 169–186.
- [4] K. TANDORI, *Über die orthogonalen Funktionen. I*, Acta Sci. Math. (Szeged) **18**, 1–2 (1957), 57–130.
- [5] Y. OKUYAMA, *On the absolute Nörlund summability of orthogonal series*, Proc. Japan Acad. **54** (1978), 113–118.
- [6] O. A. ZIZA, *On the summation of orthogonal series by Euler's method*, Matem. Sb. **66**, 3 (1965), 354–377.