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SPECTRUM OF INFINITE BLOCK MATRICES AND π-TRIANGULAR OPERATORS*

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Abstract. The paper deals with infinite block matrices having compact off diagonal parts. Bounds for the spectrum are established and estimates for the norm of the resolvent are proposed. Applications to matrix integral operators are also discussed. The main tool is the π-triangular operators defined in the paper.

Key words. Infinite block matrices, Spectrum localization, Integral operators.

AMS subject classifications. 47A10, 47A55, 15A09, 15A18.

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