AN INVERSE STURM–LIOUVILLE PROBLEM
FROM PARTS OF THREE SPECTRA

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Abstract. Certain parts of the spectra of three Robin boundary value problems are used to find the potential of the Sturm-Liouville equation on a finite interval. The inverse problem possesses a unique solution. Conditions are found necessary and sufficient for three sequences to be the corresponding parts of the three spectra. Different from previous research, this paper emphasizes the importance of Robin boundary conditions in the study of three spectral inverse problem.

Mathematics subject classification (2020): Primary 34A55; Secondary 34E05, 34L40.

Keywords and phrases: Robin boundary conditions, inverse eigenvalue problem, Sturm-Liouville equation, three spectra.

REFERENCES