



UDC 517.984

## On Recovering Integro-Differential Operators from the Weyl Function

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We study inverse problems of spectral analysis for second order integro-differential operators, which are a perturbation of the Sturm – Liouville operator by the integral Volterra operator. We pay the main attention to the nonlinear inverse problem of recovering the potential from the given Weyl function provided that the kernel of the integral operator is known a priori. We obtain properties of the spectral characteristics and the Weyl function, provide an algorithm for constructing the solution of the inverse problem and establish the uniqueness of the solution. For solving the inverse problem we use the method of standard models.

*Key words:* integro-differential operators, inverse spectral problems, uniqueness result, algorithm.

DOI: 10.18500/1816-9791-2017-17-3-276-284

*Acknowledgements:* This work was supported by the Russian Science Foundation (project no. 17-11-01193).

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**Cite this article as:**

Ignatiev M. Yu., Sovetnikova S. Yu. On Recovering Integro-differential Operators From the Weyl Function. *Izv. Saratov Univ. (N. S.), Ser. Math. Mech. Inform.*, 2017, vol. 17, iss. 3, pp. 276–284 (in Russian). DOI: 10.18500/1816-9791-2017-17-3-276-284.

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