

# Toeplitz methods in inverse spectral problems

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A new approach based on the use of truncated Toeplitz operators and Krein-de Branges theory allows us to extend Gelfand-Levitan theory in the area of spectral problems for second order differential operators to larger classes of operators. In my talk I will discuss this approach and present new examples of solutions to inverse spectral problem for canonical Hamiltonian systems. The talk is based on joint work with Nikolai Makarov.