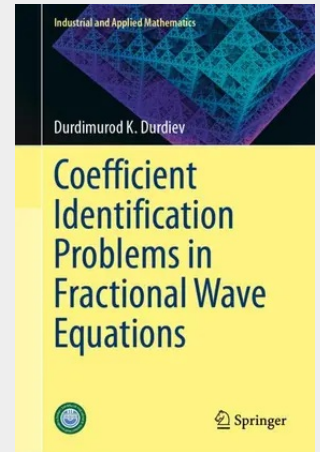


Coefficient Identification Problems in Fractional Wave Equations

This book explores a range of direct and inverse problems associated with time-fractional and time-space (fully fractional) wave equations. In the context of direct problems, it addresses Cauchy problems and initial-boundary value problems. For inverse problems, the book examines both nonlinear inverse coefficient problems and linear inverse problems focused on determining coefficients on the right-hand sides of the equations. In the fractional wave equations, the fractional derivatives are expressed using various definitions, including the Riemann–Liouville, Caputo, Caputo–Dzhrbashyan, generalized Riemann–Liouville (Hilfer), conformable fractional derivatives, and Riesz operators. The book is intended for a broad audience of mathematicians specializing in fractional differential equations and the theory of inverse problems associated with them.

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