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Jaan Janno* (jaan.janno@ttu.ee), Ehitajate tee 5, Ehitajate tee 5, 19086 Tallinn, Harjumaa, Estonia. *Inverse problems for generalized fractional diffusion and wave equations with final overdetermination.*

We consider diffusion and wave equations that contain generalized fractional derivatives where the usual power-type kernel is replaced by a more general function. Such equations occur in modelling accelerating or retarding subdiffusion and superdiffusion processes (multiterm derivatives), tempered processes (exponential factors in the kernels) etc. We pose inverse problems to recover parameters of the equations and components of source terms. We formulate existence, uniqueness and stability theorems for these inverse problems. (Received January 18, 2021)