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17. Control Theory and Optimization

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The integral games of approach are treated, in which the dynamics of the process under consideration is described by Volterra integral equations of second order, which kernels may have the summability polar peculiarity. With these games an important class of integral equations with solutions, expressed in terms of generalized Mittag-Leffler function, is closely related in a natural way. Investigation of asymptotic behavior of this function makes it possible to derive solution for a broad class of game problems, in their number for systems with fractional derivatives. In so doing, the method of resolving functions [1] is used, based on Minkowski inverse functionals.

Reference. A. A. Chikrii, Conflict-Controlled Processes, Kluwer Academic Publishers, 1997, 424 p.