ICM 1998, Berlin, Aug. 18–27

Abstracts of Short Communications and Posters

Section:

17. Control Theory and Optimization

1991 MS Classification: 34, 93

Aisagaliev, Serikbai, Kazakh State University, Kazakhstan:

Theory and constructive methods of solving the boundary problems of controllability processes.

The problems of controllability, time-optimal control, optimal control and classic boundary problems (two-pointed, periodical) for processes described by ordinary differential equations are researched. Theory and methods of solving two central problems of boundary problems: the necessary and sufficient conditions of solvability and construction the solution as a limit of minimised sequences are developed.

Reference: S. A. Aisagaliev, Optimal control of linear systems with fixed ends of trajectory and restricted control, *Differential equations,* **32** (1996), 1–8. S. A. Aisagaliev, Controllability of some system of differential equations, *Differential equations,* **27** (1991), 1475–1486. S. A. Aisagaliev, Boundary problems of ordinary differential equations, *Reports of NAS of RK,* **2** (1993), 3–8.