ICM 1998, Berlin, Aug. 18–27

Abstracts of Short Communications and Posters

Section:

17. Control Theory and Optimization

1991 MS Classification: 93E20
Pragarauskas, Henrikas, Institute of Mathematics and Informatics, Vilnius, Lithuania
Integrodifferential Bellman equations
Investigation of Bellman equations is an important part of the optimal control theory of SDEs. Depending on the regularity of coefficients and degenerateness of controlled SDEs, the value function can be characterized as a unique solution of the corresponding Bellman equation in various classes of functions. A review of recent results on the topic will be presented. Part of these results is joint work with R. Mikulevicius. Reference: R. Mikulevicius and H. Pragarauskas, Nonlinear potentials of the Cauchy-Dirichlet problem for integrodifferential Bellman equation, Lithuanian Math. J., 36(1996), 261-291.