Fənnin adı: Riyazi fizika məsələlərində optimal idarəetmə

1. The statement of optimal control problem for systems, described for ordinary difeferential equations.
2. Maximum principle for ordinary difeferential equations.
3. About sufficiency of maximum principle.
4. The statement of optimal control problem for heat equation
5. The statement of optimal control problem for vibration process
6. Optimal control problem in the process described by Partial Goursat-Darboux system
7. Maximum principle
8. The expression of maximum principle
9. Theorem (Maximum principle)
10. Adjoint problem
11. The estimation if solution, lemma.
12. Impusive variaton and estimation of increatment of solution
13. Proof of maximum principle
14. Sufficiency of the maximum principle
15. The existence of optimal control with quadratic criteria in the linear Goursat-Darboux system
16. Optimal control problem for heat equation
17. The solution of boundary value problem
18. Existene of optimal control
19. Adjoint problem for heat equation in optimal control problem
20. The necessary and sufficient condition for optimality
21. Theorem necessary condition and sufficient condition
22. Optimal control for Vibration Process

23. Optimal control for bar equation
24. The optimal control problem described by the system of Elliptic equation
25. The minimization of coercive forms
26. Theorem (Existence)
27. Theorem (Uniqueness)
28. The variational inequalities
29. Necessity and sufficienty
30. The optimal control problem for Elliptic equation
31. The optimal control problem described by Dirichlet problem for Elliptic equation
32. The optimal control problem described by Neumann problem for Elliptic equation