KVAZICHIZIQLI ISSIQLIK O`TKAZUVCHANLIK TENGLAMASI UCHUN QO`YILGAN BOSHLANG`ICH CHEGARAVIY MASALANI YECHISH

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ANNOTATSIYA

Maqolada ikkinchi tartibli parabolik tipdagi tenglamalar uchun chegaraviy masala qo`yilishi, nostatsionar issiqlik o`tkazuvchanlik tenglamasi uchun ayirmali sxemalar yaqinlashishi va maksimum prinsipi o`rganildi. Tanlab olingan namunaviy masala maksimum prinsipi va teks yaqinlashishga tekshirildi.

Kalit so’zlar: ikkinchi tartibli parabolik tipdagi tenglamalariga taluqli issiqlik o’tkazish tenglamasi bilan ifodalangan nostatsionar issiqlik o`tkazuvchanlik tenglamasi, chegaraviy masalaning qo’yilishi, ayirmali sxemalar, maksimum prinsipi va approksimatsiya.

SOLVING THE PRIMARY BOUNDARY PROBLEM FOR QUASIQUE HEAT CONDUCTION EQUATION

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ABSTRACT

The article addresses symmetric heating of a homogeneous plate using convection. This method solves the typical problem of optimal control. The problem of finding optimal control and minimum time in symmetric heating of a homogeneous plate is considered.

Keywords: Simple plate, heat transfer equation, convection, Fure criterion, optimal control, aproximation, maximum principle.