Abstract

The lecture will be about control problems for a class of distributed systems described by semilinear differential equations not solvable with respect to the time derivative. This class includes the equation of transitional processes in semiconductor, various equations of filtration theory and others. Following types of control acting will be considered: distributed, start, mixed (distributed and start controls simultaneously). The control problems will use quadratic quality functional with strong or with week norms of the state function, terminal functional. The problem of hard control without explicit dependence of quality functional on control function will be considered also.