

Faig B. GUSEYNOV

ASYMPTOTICS AS $t \rightarrow +\infty$ OF SOLUTION OF
CAUCHY PROBLEM FOR SOBOLEV-GALPERN
TIME DERIVATIVE OF THE FIRST ORDER
EQUATION

Abstract

The behaviour as $t \rightarrow +\infty$ of the solution of the following Cauchy problem

$$Q \left(i \frac{\partial}{\partial x} \right) \frac{\partial u(x, t)}{\partial t} = P \left(i \frac{\partial}{\partial x} \right) u(x, t),$$

$$u(x, 0) = \psi(x),$$

where $\operatorname{Re} \frac{P(\sigma)}{Q(\sigma)} \leq c_0$ at $\sigma \in (-\infty, +\infty)$ is studied in the paper.