

**Existence of weak solutions to the size-structured population model  
with size-selective mortality and discontinuous growth rate**

JĘDRZEJ JABŁOŃSKI

Faculty of Mathematics, Informatics and Mechanics, University of Warsaw

`jj248386@students.mimuw.edu.pl`

Size-structured model of birth, growth and mortality of Daphnia population is considered. Due to some empirical facts it is assumed that the growth rate may be discontinuous. The main theorems state that under certain (relatively weak) conditions the solution exists and the introduced numerical scheme is stable.