



Universidade Federal de Santa Catarina
Centro de Ciências Físicas e Matemáticas
Pós-Graduação em Matemática



Seminars on Differential Equations (2018.2)

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UFSC

DECAY RATES OF SOME L^2 -NORM FOR A GENERALIZED SEMILINEAR DISSIPATIVE
EQUATION OF BOUSSINESQ/PLATE TYPE

Abstract

In this work we study the existence and uniqueness of solutions and decay rates for some L^2 -norm of energy type and the L^2 -norm of solution for a semilinear generalized second order equation of Plate/Boussinesq type with fractional damping term and under effects of a generalized rotational inertia term in the case of plate equation. We show that decay rates depend on the fractional powers of the operators and using an asymptotic expansion of the solution to the linear problem we prove for some cases depending on the exponents of the operators, the optimality of the decay rates.

Thursday - October 4th, 2018

14:00 - 15:00

Room 202 - Maths Department

UFSC - Florianópolis

Check out our website: <http://mtm.ufsc.br/~bortolan/seminario/index1.html>