

L^p estimates for wave equations with strong damping*

Borislav Yordanov
Hokkaido University

We consider an abstract evolution equation generalizing the wave equation with strong damping and variable coefficients. Our goal is to derive L^p estimates, for $p \in [1, 2]$, using classical and recent results about boundary values of holomorphic semigroups. Such estimates hold, in contrast to smoothing estimates, for all uniformly elliptic differential operators in \mathbb{R}^n .

*This talk is based on a joint work with G. Todorova from the University of Tennessee-Knoxville, USA.