University of Puerto Rico Mayaguez Campus
Faculty of Arts and Sciences
Department of Mathematical Sciences
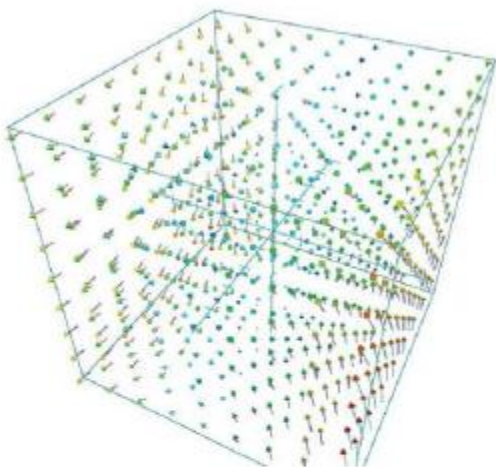call box 9000, Mayagüez, P.R. 00681

THE DEPARTMENT OF MATHEMATICAL SCIENCES PROUDLY PRESENTS
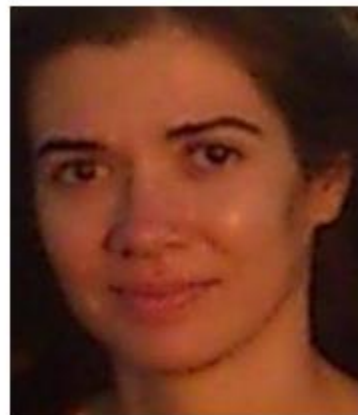
COLLOQUIUM

Fall 2021

Higher-order problems with variable exponents

Dr. Magdalena Boureanu
Romania

Sept-30-2021
10:30 am

Abstract

We are concerned with the weak solvability of the fourth-order elliptic problems with variable exponents. When dealing with exponents that vary we are exposed to additional difficulties that appear in the calculus and often we are compelled to find new ways of approach. On the other hand though, the presence of the variable exponents opens the door to novel and interesting applications involving non-Newtonian fluids, elastic materials, image processing, mathematical biology etc. Furthermore, the class of problems that we consider here involves nonhomogeneous differential operators that are more general than the usual $p(x)$-biharmonic operators.

link: meet.google.com/urm-rhmx-dhw

Ph.D. in CISE
University of Puerto Rico