Nonlinear Analysis

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This is a two-day short course in Nonlinear Analysis. On each day, there will be a problem session after the lecture.

The course is an introduction to the theory of nonlinear operators in Banach spaces. Special attention will be given to topological degree theories. Basic knowledge of Sobolev spaces will be very useful.

Table of Content

References:

1. K. Chang, *Methods in Nonlinear Analysis*, springer, 2005
2. Z. Denkowski, S. Migorski, N. Papageorgiou, *An Introduction to Nonlinear Analysis*, Kluwer Academic Publishers, New York, 2003
3. Pavel Drabek, *Methods of Nonlinear Analysis: Applications to Differential Equations*, Birkhauser verlag AG, 2007