

Lecture announcement for the course nmma583:

*Analysis for instationary partial differential
equations*

by Dr. Sebastian Schwarzacher

The course has the intention to prepare students for challenges that occur when instationary PDEs are non-linear. The lecture introduces techniques for existence, uniqueness and regularity theory which are suitable for non-linear settings; however, they will be introduced on the most simple model examples. Starting from the heat equation we will detect fundamental principles and then introduce ways to generalize these to more sophisticated problems. The generalization shall be made in accordance to the particular interests of the audience.

Obligatory for the course is the knowledge of the Lebesgue theory of integration. Some knowledge on weak differentiation and Sobolev spaces is recommended. The course is intended for Master- and PhD- students that are keen to do research in mathematics.

Time: Monday at 10:40, Location: K9, Start: 10.10.2016