



universität
wien

Fakultät für Mathematik

EINLADUNG

zu

einem didaktischen Vortrag

im Rahmen der Habilitation von

Elisa Davoli, PhD

(Fakultät für Mathematik, Universität Wien)

“Implicit and Inverse Function Theorems”

“Implicit and Inverse Function Theorems”

Abstract:

In this talk we will review two fundamental theorems in analysis: the Implicit Function Theorem and the Inverse Function Theorem. The first result, roughly speaking, allows to identify when a subset of \mathbb{R}^N of the form

$S := \{x \in \mathbb{R}^N : F(x) = 0\}$, for $F: \mathbb{R}^N \rightarrow \mathbb{R}$,

can be “locally” characterized as the graph of a function. The second result provides conditions to ensure that a function is “locally” invertible in \mathbb{R}^N . We will present the statements and proofs of both results, and we will conclude by discussing some examples.

12. September 2019,

10:00 Uhr – 10:45 Uhr,

Fakultät für Mathematik,

Oskar-Morgenstern-Platz 1,

HS 11, 2. OG.

Henk Bruin