Franz Gmeineder

University of Konstanz, Germany

Extension and differential constraints

Extension operators are at the core of studying function spaces, allowing us to reduce numerous problems on domains to those on full space. While this theme has witnessed a huge number of contributions over the past century, very little is known on extension operators that preserve certain differential constraints. In this talk, we will give a rather complete picture for divergence-type constraints, where we put a special focus on the borderline case p = 1 and thereby answer a borderline case left open by Kato, Mitrea, Ponce & Taylor.

This is joint work with Stefan Schiffer (MPI MIS Leipzig).