

Franz Gmeineder

University of Konstanz, Germany

Traces for L^1 -based function spaces

In this talk, we discuss optimal trace estimates in L^1 -based function spaces. Here the differentiability is not determined by full k -th order gradients, but only certain differential expressions belonging to L^1 . Proceeding in this way, we obtain the first generalization of Aronszajn's coercive inequalities for linear systems with L^1 -data on domains, but also a new approach to the classical Uspenskii theorem on sharp Besov traces in the higher order case.

The results presented in this talk are based on joint work with J. Van Schaftingen (U Louvain) and B. Raita (U Pisa).