Title: Fractional Orlicz-Sobolev spaces

Abstract: Optimal embeddings for fractional-order Orlicz–Sobolev spaces are presented. Related Hardy type inequalities are proposed as well. Versions for fractional Orlicz-Sobolev seminorms of the Bourgain-Brezis-Mironescu theorem on the limit as the order of smoothness tends to 1 and of the Maz’ya-Shaposhnikova theorem on the limit as the order of smoothness tends to 0 are established. This is a joint work with Angela Alberico, Lubos Pick and Lenka Slavikova.