

# Composition operators on Sobolev spaces

A. Ukhlov

(joint with V. Gol'dshtein)

We study composition operators on the Sobolev spaces with the first weak derivatives induced by generalized quasiconformal homeomorphisms (the so-called homeomorphisms with bounded  $(p, q)$ -distortion). One of the main problems here is invertibility of these operators in the class of "dual" Sobolev spaces. Study of these classes is important because of applications of composition operators to the Sobolev type embedding theorems and quasilinear elliptic equations.