

OPTIMAL EMBEDDINGS OF GENERALIZED SOBOLEV SPACES

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ABSTRACT. Optimal embeddings of the homogeneous Sobolev spaces built-up over function spaces in \mathbb{R}^n with K -monotone rearrangement invariant norm into another rearrangement invariant function spaces are discussed. The investigation is based on pointwise and integral estimates of the rearrangement of f in terms of the rearrangement of the derivatives of f .