

Entropy numbers of embeddings of weighted Besov spaces

The talk presents results of joint work with T. Kühn (Leipzig), W. Sickel (Jena) and L. Skrzypczak (Poznan). We investigate the asymptotic behaviour of the entropy numbers of the compact embedding

$$\text{id} : B_{p_1, q_1}^{s_1}(\mathbb{R}^d, w_1) \hookrightarrow B_{p_2, q_2}^{s_2}(\mathbb{R}^d, w_2).$$

Here $B_{p, q}^s(\mathbb{R}^d, w)$ denotes a weighted Besov space. The asymptotic behaviour is well-known for polynomial weights. Here we present an approach which allows to work with a more general class of weights.