

**EMBEDDINGS AND THE GROWTH ENVELOPE OF BESOV
SPACES INVOLVING ONLY SLOWLY VARYING SMOOTHNESS**

BOHUMÍR OPIC
CHARLES UNIVERSITY, PRAGUE

Abstract. We characterize local embeddings of Besov spaces $B_{p,r}^{0,b}$ involving only a slowly varying smoothness b into classical Lorentz spaces. These results are applied to establish sharp local embeddings of Besov spaces in question into Lorentz-Karamata spaces. As consequence of these results, we are able to determine growth envelopes of spaces $B_{p,r}^{0,b}$ and to show that we cannot describe all local embeddings of Besov spaces $B_{p,r}^{0,b}$ into Lorentz-Karamata spaces in terms of growth envelopes.

The lecture is based on a joint research with António M. Caetano and Amiran Gogatishvili.

E-mail address: `opic@karlin.mff.cuni.cz`