

**Compactness of Sobolev embeddings with upper  
Ahlfors regular measures**

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A lot of different Sobolev-type embeddings (e.g., classical Sobolev embeddings in the Euclidean setting, boundary trace embeddings, trace embeddings on manifolds, some weighted Sobolev embeddings), which are often treated separately, can be viewed as special instances of Sobolev embeddings with respect to upper Ahlfors regular measures (i.e., Borel measures whose decay on balls is bounded from above by a power of their radii). The aim of this talk is to present in some sense sharp compactness results for such embeddings in the general setting of rearrangement-invariant spaces.