W Desmond Evans* (EvansWD@cardiff.ac.uk), School of Mathematics, Cardiff University, Senghennydd Road, Cardiff, Wales. On the approximation numbers of Sobolev embeddings and their distribution.

The aim of the lecture will be to describe techniques for obtaining upper and lower bounds and asymptotic formulae for functions which count the approximation numbers of Sobolev embeddings. A survey of results on Hardy-type operators on intervals and trees which are relevant to the main theme of the talk will also be given. (Received January 24, 2006)