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Using hyperbolic fillings to connect Besov spaces of functions on doubling metric space to Sobolev functions on uniform domains

In this talk we will describe a way of identifying Besov spaces of functions on a compact doubling metric measure space as traces of Sobolev spaces on uniform domains. Functions in Besov spaces have non-local energy and so it is advantageous from the point of view of regularity theory to associate them with more local energy spaces such as Sobolev spaces. This talk is based on joint work with Anders Bjorn and Jana Bjorn.