Sobolev spaces on infinite-dimensional domains

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This topic is concerned with investigation of Sobolev spaces on domains in infinite-dimensional spaces with measures. Main directions of research are connected with consideration of diverse measures on domains (restrictions of Gaussian measures, convex measures, differentiable measures, Poisson measures, etc.), comparison of diverse definitions (in particular, definitions via completions and restrictions of Sobolev class functions on the whole space), extensions of Sobolev functions from domains to the whole spaces, various embeddings and inequalities (such as generalizations of the Poincaré inequality).

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