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A class of infinite dimensional stochastic processes with unbounded diffusion and its associated Dirichlet forms

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This thesis consists of two papers focused on a particular type of diffusion type Dirichlet form. This Dirichlet form has an in general unbounded diffusion operator and in the first paper, properties such as closability and quasi-regularity is investigated. This study is done both in a flat setting and on a Riemannian manifold.

The second paper focus on the associated infinite dimensional process. In this paper properties such as convergence in distribution and quadratic variation is considered.

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