Ornstein-Uhlenbeck operators and semigroups

This series of lectures gives a concise introduction to the theory of Ornstein-Uhlenbeck operators and semigroups.
At the beginning some general basic information about operator semigroups and Gaussian measures will be given.
Then Ornstein-Uhlenbeck operators and semigroups in the finite-dimensional case will be introduced and discussed,
in particular, the corresponding domains of generators and the associated Gaussian Sobolev classes will be considered.
The logarithmic Sobolev inequality and hypercontractivity will be involved. The infinite-dimensional case will be also discussed
along with a number of challenging open problems in this area.