



Assignments for the lecture
Introduction to Noncommutative Differential Geometry
Summer term 2019

Assignment 1A
for the tutorial on *Tuesday, April 23, 10:15 am* (in Seminar Room 10)

Exercise 1. Refresh your knowledge of unbounded linear operators on Hilbert spaces. For that purpose, prepare a short survey talk (approximately 20-30 minutes) covering in particular the following topics:

- definition of unbounded linear operators between Hilbert spaces;
- closed and closable operators;
- the adjoint of a densely defined unbounded linear operator;
- symmetric, selfadjoint, essentially selfadjoint operators.

It suffices to give the main definitions and the relevant theorems; proofs are not required.