Kiril Datchev MA 546 Spring 2025

Homework 7

Due March 5th on paper at the beginning of class. Please let me know if you have a question or find a mistake.

- 1. Exercise from page 3 of https://www.math.purdue.edu/~kdatchev/546/frechet.pdf.
- 2. Exercises 2.7 and 2.8 from *Borthwick*.
- 3. Prove that a weakly convergent sequence in Hilbert space is bounded.