HOMEWORK ASSIGNMENTS
245C, SPRING 2019

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We refer to exercises from the book *Real Analysis*, by G. B. Folland. Only homeworks marked * will be collected and a subset of them be graded. However, we suggest that you work all exercises of this assignment.

1. Due April 15

**Section 6.4.** Exercise 35; Exercise 36*; Exercise 37*; Exercise 38*; Exercise 40.

2. Due April 29

**Section 6.5.** Exercise 41*; Exercise 42; Exercise 44;
Exercise 45*: here you may rather show that $T_\alpha$ is weak type $(1,q)$ where $q = n/\alpha$. You also may rather show that $T_\alpha$ is strong type $(p,r)$ where $r^{-1} + 1 = p^{-1} + n^{-1}\alpha$.

**Section 8.1.** Exercise 1; Exercise 2; Exercise 4*.

3. Due May 15

**Section 8.2.** Exercise 5; Exercise 7; Exercise 8*; Exercise 9*.

**Section 8.3.** Exercise 12; Exercise 13; Exercise 14*; Exercise 18.