## Homework 11 and 12 APPM 4720/5720 Fall 2018 Advanced Convex Optimization

**Due date**: Friday, Nov 16 2018 Theme: Interior Point Methods

**Instructions** Collaboration with your fellow students is allowed and in fact recommended, although direct copying is not allowed. The internet is allowed for basic tasks. Please write down the names of the students that you worked with. An arbitrary subset of these questions will be graded.

Instructor: Dr. Becker

NOTE: this is an **optional** homework. If you turn it in, it will count for your grade. You can choose to turn in just HW 11, just HW 12, or both.

**Reading** Read the rest of chapters 9–11 in [BV2004].

## Homework 11: Interior Point Methods (IPM)

**Problem 1:** Exercise 9.1 in [BV2004]

**Problem 2:** Exercise 10.1 in [BV2004]

## Homework 12: papers

**Problem 1:** Read one of the papers mentioned in the syllabus (in the "Research articles" section) and give a summary of the paper. **Deliverables:** typed summary, at least one page, no more than five pages.