# 0 — PHY 494: Makeup assignment 0 (25 points total)

Due Tuesday, April 18, 2017, 5pm.

This is a **optional Makeup Assignment**. If you choose to hand it in by the deadline, it will be graded like a normal homework assignment. If its grade is better than your worst homework grade then it will replace that grade.

Submission is to your private GitHub repository.

# 0.1 Your Own Project

Design your own *small* project. It will be graded as a makeup homework assignment, based on your *project Proposal*.

## 0.1.1 Project Proposal

You must produce a **Project Proposal**. This document will be the basis for defining your project, act as a road map, and define what counts as success.

- 1. Format: title and your name and GitHub name; 1 page maximum.
- 2. Answer the following questions succinctly:
  - What is the project about and what problem are you trying to solve? (Background)
  - What are two or three specific objectives? (Objectives)
  - How can one judge if an objective has been fulfilled? (Measuring success)
  - What are the methods/approaches that you intend to use to achieve your objectives? (Methods)

#### 0.1.2 Approval process

Discuss your project with the instructor by sending the project Proposal by email. The instructor will either accept the Proposal or ask for changes. If changes are requested you are then free to accept them and start the project or propose amendments. After one round of amendments all decisions by the instructor are final.

### 0.1.3 Grading

The instructor (and/or TA) will grade the project, using the Proposal as a benchmark to judge success. Grading will also take into account

- code runs and produces the promised results
- results are presented in a readable and coherent fashion (e.g., a notebook with sufficient text and equations)

- difficulty of the problem
- $\bullet$  proper attributions and acknowledgments
- Bonus: elegance and speed of code