Final Project

PHY494 Computational Methods in Physics (2016)

Requirements

- team (3)

- GitHub repository

- keep "lab notebook" on wiki page

- final poster presentation

  - abstract, poster as PDF

  - description of contributions (PDF)
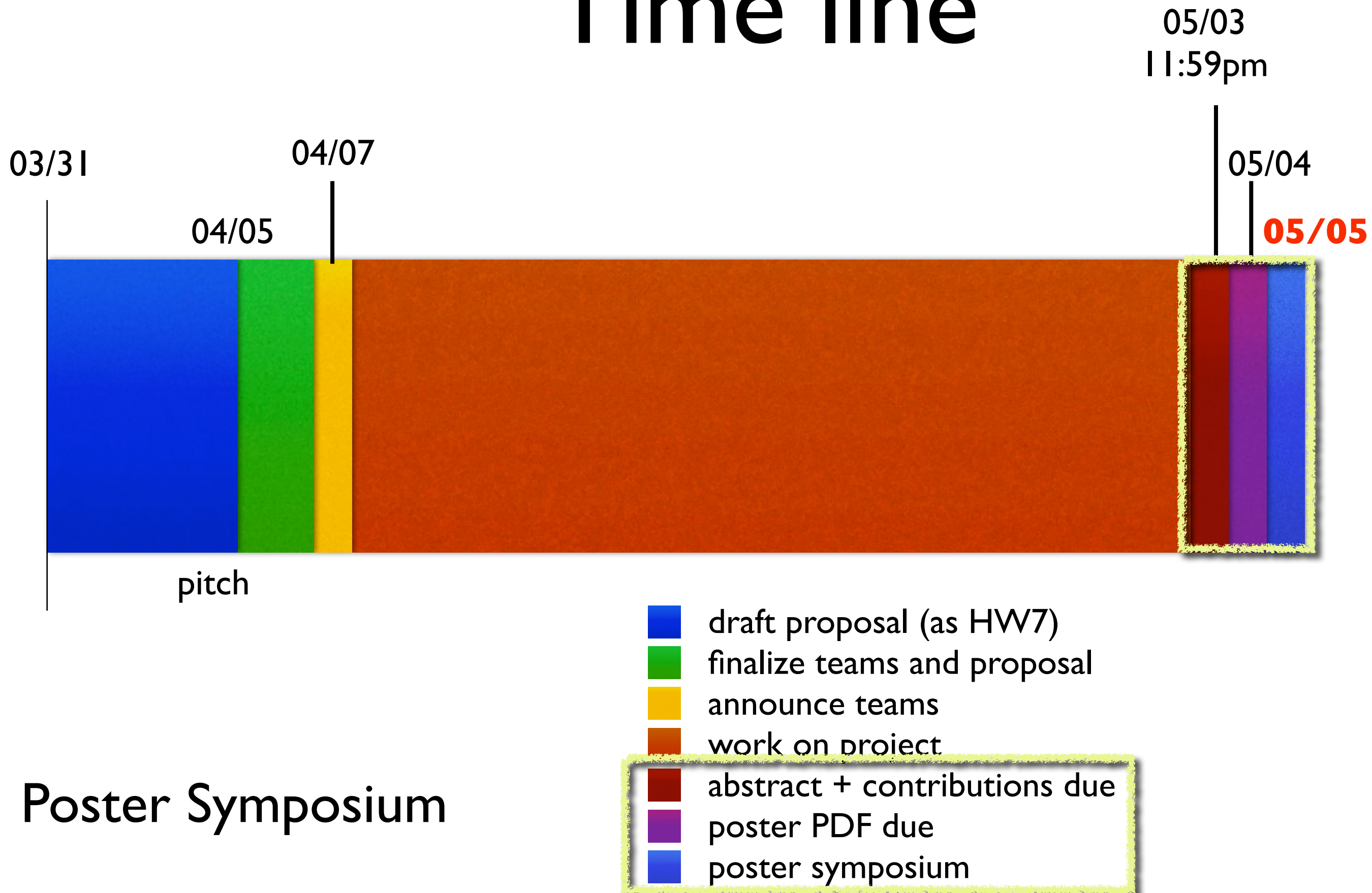
  - individual Q&A

Grading

- code, achieves objectives (30%)

- teamwork (contributions, commits, evidence of communication) (10%)

- keep "lab notebook" on wiki page (5%)

- final poster presentation

  - abstract (5%)

  - poster (20%)

  - individual Q&A (30%)

Projects

All projects are public on
https://github.com/ASU-CompMethodsPhysics-PHY494

Time line

05/03
11:59pm

03/31

04/07

04/05

05/04

05/05

pitch

Poster Symposium

- 🟦 draft proposal (as HW7)
- 🟩 finalize teams and proposal
- 🟨 announce teams
- 🟧 work on project
- 🟥 abstract + contributions due
- 🟪 poster PDF due
- 🟦 poster symposium

Abstract

- 1 abstract per team

- include title, authors, text

- maximum 200 words

- use the template in `poster/abstract.txt`

- due: 5/3/2016 11:59pm (submit through repository)

Abstract

- What was the problem to be solved? Background and why is it interesting? What are the major hurdles? What was your goal?

- How did you approach the problem, what methods did you use (keep high level, don't list code or function names)?

- What are the results and what do they mean? Was the goal achieved?

- Conclusions/future work (1 sentence)

Abstract

- How to get the code?

  "Code is available at <GitHub URL>"

- *Optional*: License your code (see http://choosealicense.com/):

  "under the <LICENSE>."

Contributions

- submit a file `poster/contributions.pdf` detailing who did what (plain text file is also ok)

- use GitHub usernames instead of real names

- submit together with the poster

Poster PDF

- submit a PDF of your poster through your GitHub repository as poster/poster.pdf

- due: 5/4/2016 11:59pm

- either 1 page PDF (full poster) or multi-page (if poster will be assembled from pages)

Poster Session

- 5/5/2016

- PSH 355

- 11:30am – 2pm

- all team members must attend

- individiual Q&A at board (<10min) will constitute the individual component of your grade

- Ian and David will also do Q&A but their comments to me about you can only *improve* your grade.

Poster

- poster boards: 30 x 40 in

- portrait or landscape

- print poster (expensive) or assemble from individual pages

- mounting material (boards, tape, …) will be provided

Poster: Required

- title

- names of authors

- repository URL

- Acknowledgements section (*if* help from outside of team)

Poster: Recommended

1. Background (WHY?)

problem, equations to be solved, motivation

2. Methods (HOW?)

algorithms, parameters, code snippets, flow diagrams, object diagrams, libraries used, …

3. Results (WHAT?)

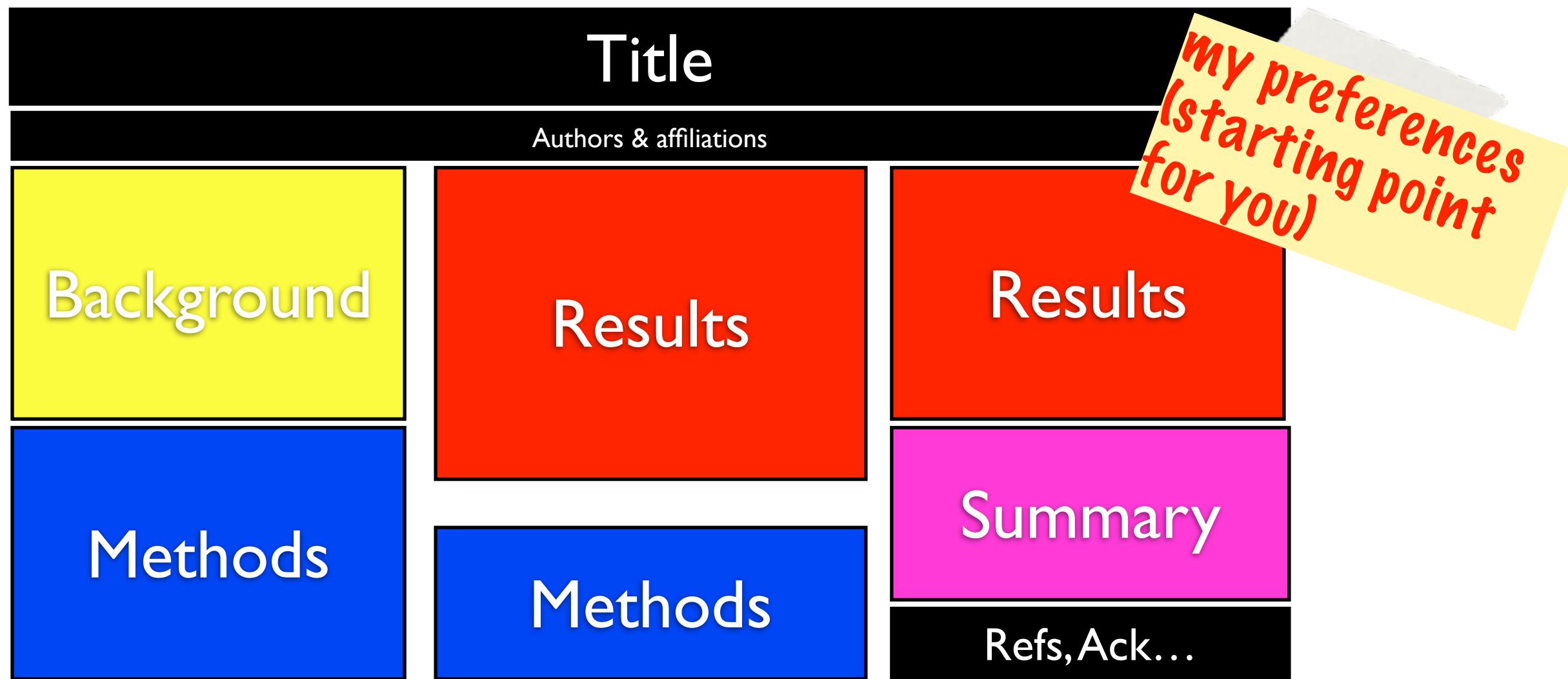focus on graphs, images and tables: show data (only little text to annotate data)

Poster: Recommended

4. Conclusions or Summary

   ~1 paragraph text summary + future work

5. References (if any)

   Small print section… paper references, URLs, …

- tell a **story** (beginning, middle, end)
- poster **+ you** = poster presentation
  (does not have to make sense without you)
- add what you need **illustrate** your story

Typography

- sans serif fonts (Helvetica, Gill Sans, Optima, Arial, …)

- font sizes

title	64 pt
authors	42 pt
headings	40 pt
text	30 pt
references, acknowlegements	15 pt

Tools

- full size poster (vector graphics tools): Inkscape, Adobe Illustrator

- individual pages posters: whatever you use to make presentations (LaTeX, Powerpoint, OpenOffice, Keynote, …)