# MA4492: Projects

Richard M. Timoney

## Requirements

Module description http://www.maths.tcd.ie/
undergraduate/modules1718/MA4492.php

1. Write up of what you have done
2. Poster
3. (Informal) oral presentation

Dates: write up due March 16th
(Prefer: pdf by email plus one spiral bound copy)

## Write up

- Should be in the style of a scientific article (mathematical, perhaps expository)
- So should have title, your name as the author, chapters or sections of content and a bibliography.
- What have you done? Explain it as well as you can! Probably start with an overall summary (perhaps an abstract first) then some background.
- We expect an amount of effort and sophistication equivalent to a full year $5 + 5 = 10$ credit module Does your write-up show that?
- Don't transcribe stuff. If you find a perfect explanation of something, probably best to refer to it (if it is long anyway) — but it is no problem to reproduce an explanation in the literature with your own slant or more explanations of the steps.

## Write up

- Plagiarism is *a serious offence*. Say where you are taking stuff from. Cite your bibliography precisely. Your bibliography should be in the style of typical journal articles.
- Will we know you have understood what you did?

## Resources

- Main library (use online catalogue)
- Maths research library (ask me if you need to access or borrow). Online catalogue https://www.maths.tcd.ie/local/library/ (maths home page → local access → library)
- Online resources:
    - MathScinet (database, Main library subscription, off campus access via Main Library catalogue)
    - ArXiv preprint server (more or less universal for TP stuff, quite extensive in many areas of pure mathematics for recent material) http://front.math.ucdavis.edu/ or https://arxiv.org/
    - http://inspirehep.net/ for TP
    - Wikepedia — use with care and verify

Make notes of where you are finding things

## How to prepare your write up

- LaTeX is probably best for mathematical stuff, but it is a bit of a hurdle. Steps:
    - Create valid source file — say *JohnsProject.tex* using a simple editor
    - save and run *latex JohnsProject*
    - run *xdvi JohnsProject* to view output on screen
    - go back to add to *JohnsProject.tex*
    - note that *pdflatex JohnsProject* produces *JohnsProject.pdf*

- `texworks` is a reasoanbly simple wrapper that does this (based on the `TeX Live` distribution)
  Online sites allowing you to prepare LaTeX documents may also be workable.

- Word might do if your project has not got many formulae.

## How to prepare your poster

- Last few years I think most used LaTeX
- pdf to Emma, we got printed (once)

**Posters session: (probably) Thursday April 5th, 2018.**

October 19, 2017