

# How to get started in basilisk CFD solver

Jishnu Goswami

Physics of Fluids and Soft Matter, Manchester Centre for  
Nonlinear Dynamics, Department of Physics and Astronomy,  
University of Manchester, Oxford Rd, UK

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# A few points

- ▶ Basilisk works on adaptive Cartesian grids. (something I don't know anything about right now)
- ▶ Basilisk is written in a variant of c language.
- ▶ The prerequisites for learning basilisk are the following -
  1. A good knowledge of C Programming Language
  2. A good hand in shell scripting

- ▶ The meaning of installing basilisk into your computing system is to download the source codes from a remotely hosted repository.
- ▶ There are two ways of getting the source codes of basilisk
  1. Downloading the source code using *darcs*. The principal benefit here is that this is version controlled.
  2. Downloading the source code via *tarball*
- ▶ The basilisk code is hosted at [darcs](#). This is an open source version control system. So a little familiarity with this can be helpful.
- ▶ To run the basilisk codes, we need a c99 compliant compiler. I am not really comfortable about compilers and different related versions of compilers present. I should look into it in a great detail. Important for GTA stuff too.

# Numerical Methodology

- ▶ The time-integration step for solving saint-venant equation involves a generic predictor-corrector nummerical scheme. I need to look into this predictor-corrector method to better understand the numerical schemes at play
- ▶ In this example, the issues with *compilers* and *linkers* are introduced. The basic concepts of compilers and linkers are not clear to me.