cGENIE WORKSHOP: A Hitchhikers Guide to the
Black Arts of Earth system modelling
(‘or why you should not want know what is in a sausage’)
29th + 30th May 2012; UCSC

Day 1 (Thursday 29th Nov.) – Earth system modelling for ‘newbies’*

START (ca. 2 pm)

- Presentation – Introduction to (Earth system) modelling and cGENIE
  Introduction to numerical and Earth system modelling.
  Presentation on the cGENIE model structure, science components,
  nomenclature, accessibility to source code, etc.
- Session I – Getting started
  Accessing the computing cluster; installing and compiling cGENIE; cGENIE
directory structure (‘where everything is’).
  Command-line operation; how to submit jobs to a cluster queue.
  Concept of a ‘restart’; experiment started from ‘cold’ vs. from end of previous run.
  Time-series, time-slice (2D and 3D) output; integration intervals and specification
  of frequency of data saving. Panoply and MATLAB visualization resources.
  Setting up experiments: configuration files and setting parameter values.
  Exploring the behaviour of the Earth system: Snowball Earth.

END (ca. 5 pm)

Day 2 (Friday 30th Nov.) – Getting your hands dirty

START (ca. 10 am)

- Session III – ‘Poking the climate beast’
  Geochemical ‘forcings’ of cGENIE and tracing ocean circulation.
  Exploring the stability of the Atlantic meridional overturning circulation (AMOC).
- Session IV – Poking the carbon cycle
  CO₂ emissions and future ocean acidification.
  Role of deep-sea sediments.
- Session V – Paleo biogeochemical cycling and climate
  Mucking about with the Cretaceous climate and carbon cycle.

END (ca. 4 pm)

*DRAFT

* [Google it]