António Figueiredo's Code Camp Report — Garching, March 2013

Worked on IMP3 and ISM (some IMP4 work as well)

IMP3:

- Moved to the new gateway, configured environment, copied data, etc.
- Training sessions:
  - Using HPC & Grid with Kepler (problem with certificate solved)
  - Equilibrium and MHD chain
  - Update on status of ETS_A
- Contributed to the discussion of ETS requirements from the ISM
- Rebuilt specific Kepler actors for ISM work using ETS_A (available in ~anfi/public):
  - BgBfromJETTO
  - DfromChisBgB
  - FixNeoclassic
- Fixed a bug in the "DfromChisBgB" actor (Luca Garzotti's BgB companion model for particle diffusion in JET hybrids) that showed up with the Intel compiler
- Modified my copy of ETS_A to use "neo", the NCLASS actor used in ETS_C (from Philippe), and created a couple more actors for that (also publicly available):
  - Compositions2Composition (used an IMP5 routine from Thomas)
  - FillNeoclassicCompositionsFromCoreprof
- Found a limitation in ETS_A and requested it's removal, namely the neoclassic CPO is not filled at startup, which prevents using "neo"
- Reported and (old) ETS Fortran bug that prevented the output of QOH in coreprof/profiles1d

ISM:

- Worked aiming at getting results for the EPS paper on modelling JET hybrid pulses
  - Needed to do IMP3 & IMP4 work for that
- Tried to recover the conditions available and the results obtained in Innsbruck last December:
  - Took an updated (not anymore, but hopefully recent changes will be easily introduced) version of ETS_A and configured it as required
  - NCLASS has been imported from ETS_C (no impurities) and is ready to work in ETS_A, but it was not possible to use it due to a limitation of the workflow (work in progress)
  - Impossible to recover previous results due to a UAL bug (only 1 time slice available reading CPOs with arrays of structures, such as coresource)
- Input run updated for pulse 77922 (Jparallel and g1 were added) and created for 79635 (Jorge)
- Neoart seems to be working and should provide impurity transport, but could not do detailed study due to UAL bug