

# PROJECT 1

## In class presentations on characteristics of computational science and engineering PSEs

### HY514

**Group 1:** Presentation on comparison of mathematical PSEs

Resources:

a) [http://en.wikipedia.org/wiki/Comparison\\_of\\_numerical\\_analysis\\_software](http://en.wikipedia.org/wiki/Comparison_of_numerical_analysis_software)

b) <http://www.scientificweb.de/ncrunch/>

**Group 2:** Prepare presentation on GAMS system

Resources: <http://gams.nist.gov/>

**Group 3:** Presentation on PETSc PSE

Resources: <http://www.mcs.anl.gov/petsc/>

**Group 4:** Presentation on NEOS server

Resources: <http://www.neos-server.org/neos/>

**Group 5:** Presentation on Sage

Resources: Notes in eclass, <http://www.sagemath.org/>

**Group 6:** Presentation on Python

Resources: Notes in Houstis e-book (see eclass documents), many resources (check web)

**Group 7:** Presentation on MatLab

Resources: Notes in Houstis e-book (see eclass documents), many resources (check web)

**Group 8:** Presentation on MatLab Tool Boxes

Resources: Notes in Houstis e-book (see eclass documents), MatLab numerical optimization toolbox (2 pdf αρχεία στο eclass)