GRID COMPUTING (10 POINTS)

The basic steps required to use the Austrian Grid will be shown in the Lab. For this sheet you will need to render our movie on two sites of the following 3 Austrian Grid sites:

karwendel.dps.uibk.ac.at

login.leo1.uibk.ac.at

lise.jku.austriangrid.at

- 1. Copy all applications need to be executed on the resource: povray and gm; (1 points)
- 2. Write a application that can be executed on karwendel, that starts the povray movie rendering on the Grid resources and collects the result. (4 points)
- 3. Collect the execution times of the Jobs on the selected resources and develop a scheduling that has as little load imbalance as possible (the resources have different execution speeds!). You might need to increase the number of frames to make this possible. (5 points)

Useful commands:

- ~\$ grid-proxy-init
- ~\$ globus-url-copy gsiftp://lise.jku.austriangrid.at/~/foo gsiftp://login.leo1.uibk.ac.at/~/foo
- ~\$ globus-job-run karwendel.dps.uibk.ac.at /bin/hostname