How to ensure that the users of a high-energy physics experiment community fairly use the computing resources available?

**Problem parameters:**
- The Grid available computing and storage resources are finite.
- The users belong to one or more groups.
- Different groups run different kinds of jobs (CPU, Storage Space, and Memory usage).
- Any user or group cannot monopolize the use of the resources blocking others to use them.

**Solutions**
- **Distributed:** Priorities enabled at the sites
- **Central:** Priorities enabled at the Central Task Queue

**DIRAC Job Scheduling**

**DIRAC priority agent**
A DIRAC "Priority" Agent is responsible for computing and updating the job priorities. The priority of the job determines the order in which the job will be executed. The Matcher serves jobs taking into account the priority.

**Variables used to determine the priority of a job**
- Group
- User
- Job Type
- Time Spent in the DIRAC Task Queue
- User defined Priority
- Accounting information
  - How much CPU power, Memory, and Storage have been consumed in the past

**Priority calculator plugin**

**Central accounting and the application of job priority in a central Task Queue allows DIRAC to plug-in standard batch system components.**

Achieved so far:
- Calculated the priority of a job and enforce the fair share of the resources using only the information contained in DIRAC.
- Plugged in an external component (MOAB), and directly use it.