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## **Grid-CSIC project: porting astrophysic applications to Grid**

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Two important problems related to astrophysics applications are high computational cost and limited storage. The Grid-CSIC Project promotes the use of Grid infrastructure on the research institutes of Spain. The Institute of Astrophysics of Andalusia (IAA-CSIC) joined this project in order to provide scientific application support in the astrophysics area. Several applications have been implemented by the infrastructure work team.

### **Detailed analysis**

We show the architecture of the Grid node, the additional installed software, and how the work team has implemented the migrated applications. The astrophysical applications which have been ported to Grid infrastructure are varied, i.e: extragalactic astronomy applications, stellar physics applications, radioastronomy applications, galactic structure applications or solar system applications.

### **Conclusions and Future Work**

There are many applications in the astrophysics area, and we intend to continue migrating applications. to the grid infrastructure

### **Impact**

The work has resulted in a decrease of the elapsed computational time of the applications thanks to the distribution over the grid infrastructure.

### **Keywords**

Grid, Astrophysic, porting

### **URL for further information**

<http://www.grid.csic.es/>

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