PRESS RELEASE

Catania, Thursday, 5 March 2009

The ASTRA project, standing for Ancient instruments Sound/Timbre Reconstruction Application, has revived an instrument that hasn't been played or heard in centuries.

Using the Enabling Grids for E-sciencE infrastructure for computing power, a team based in Salerno and Catania, Italy, has reconstructed the "epigonion," a harp-like, stringed instrument used in ancient Greece. With data from numerous sources, including pictures on urns, fragments from excavations and written descriptions, the team has been able to model what the instrument would have looked and sounded like. Their model has become sophisticated enough to be used by musicians of the Conservatories of Music of Salerno and Parma in concerts.

"This is an exciting moment in my career", said Francesco De Mattia, professor at the Conservatory of Music of Parma, Director of the Conservatory of Music of Salerno and Artistic Co-ordinator of the ASTRA (Ancient instruments Sound/Timbre Reconstruction Application) project. "It was already a major achievement to reconstruct the sounds thanks to advanced networks and grid computing, but being able to make them part of a real concert is just fantastic!"

The idea and mathematical concepts behind this work is several decades old, the first attempts being made in 1971. Now with grid technology these researchers have the required computing power to recreate an ancient instrument that would previously have been too expensive and too difficult to manufacture by hand. Using grid computing also means that the data used and discovered during the research is easily available to other researchers, such as archaeologists and historians.

"The combination of the EGEE grid computing infrastructures and the high speed GÉANT2 and EUMEDCONNECT networks provided not only the immense computing power needed by ASTRA, it also allowed researchers, historians, physicists, engineers, archaeologists to bring their knowledge and their experiences together," added Domenico Vicinanza, Technical co-ordinator of ASTRA project and DANTE Network Engineer. "The benefits of the collaborative approach used in this project are far reaching. ASTRA and EGEE not only make it possible to recreate instruments not existing anymore, they also allow any model and its associated data to be accessed by the whole scientific and education community worldwide"

The ASTRA project will be demonstrating the epigonion at this week's EGEE User Forum, 2-6 March 2009, Catania, Italy. People will be able to listen to the reconstructed instrument and play it using a MIDI keyboard. The demonstration will also allow visitors to run real reconstruction on the grid. A professional musician will play ancient scores on the epigonion.

Notes for Editors

Follow the EGEE User Forum live via GridCast at **http://gridtalk-project.blogspot.com** and Twitter at **http://twitter.com/EnablingGrids**. Photos from the conference will be tagged on Flickr with "egeeuf09."

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The Enabling Grids for E-sciencE (EGEE) project is co-funded by the European Commission. The project aims to provide researchers in both academia and industry with access to major computing resources, independent of their geographic location.

EGEE's main aims are:

1. To build a secure, reliable and robust grid infrastructure
2. To supply a computing service for many scientific disciplines
3. To attract, engage and support a wide range of users from science and industry, and provide them with extensive technical and training support.

For more information see **http://www.eu-egee.org** or contact Catherine Gater, EGEE Dissemination, Outreach and Communications Manager, on + 41 (0)22 767 41 76 or email Catherine.Gater@cern.ch.

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Photos and images available.

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EGEE III is co-funded by the European Commission under contract number INFSO-RI-222667