

## **Grid Computing in the High School Classroom**

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Electronic laboratories (e-Labs) are Web-based tools that allow high school students to explore scientific data using techniques and resources from the Open Science Grid. Students can upload data from their classroom cosmic ray detectors, probe data from CERN's CMS test beams, and will soon explore environmental monitors from LIGO. They can publish their findings in on-line posters and provide commentary on posters from other users. Students can discover and extend the research of other students, modeling the processes of modern large-scale experiments. There is a growing contingent of international users who have built classroom detectors and are uploading data. These collaborators will soon explore ways to deploy additional

e- Labs. A new collaboration, Interactions in Understanding the Universe has formed to provide support for developing e-Labs, opportunities to evaluate their effectiveness, resources for development as well as limited compute cycles for student jobs and data storage for their results.