

# EPO\*: NRAO's Community Connection

\*Education and Public Outreach

July 2005

## World Year of Physics Celebration, July 15-16

Just a reminder of activities planned to celebrate the World Year of Physics:

- Friday, July 15, 7 p.m., Skeen Library: Jim Eckles of the White Sands Missile Range will present a free lecture on the History of the Trinity Site
- Trinity Site tours begin at 8 a.m. on Saturday. Enter through the Stallion Gate, 12 miles east of San Antonio on Hwy 380
- VLA tours begin at noon Saturday and run until 4:00 p.m.
- Saturday night, 7:00 p.m., Jim Ulvestad will speak on 25 years of VLA history at the Skeen library.

All events are free, no reservations needed.

## VLA Connects With Students from Puerto Rico to California

On Thursday, May 26, the day AFTER classes were out, eight seventh graders showed up at school in Brewton, Alabama, at 7 a.m. Their mission: to monitor the atmosphere of Uranus using the huge radio telescope in Goldstone, California.

These students were participating in the Uranus campaign of the Goldstone Apple Valley Radio Telescope project known as GAVRT. At the same time, Dr. Mark Hofstadter of JPL was observing Uranus with the VLA. In live teleconferences from the VLA control building, Mark, along with Pat Reeder and Dave MacLaren of the GAVRT

project, spoke to students at four different schools during the course of Mark's observation. The campaign is using the students' data to look at changes in the climate of Uranus. Throughout the course of the conferences, students learned about the VLA as well as how their single-dish data is being used and what conclusions are being drawn from it. Images from the VLA data will be sent to the students so they can compare them with images made in earlier years.



A total of 62 students from schools in Alabama, Puerto Rico and California took part in the observation.

## Summer Students (and Teacher!) Are Here!

They started arriving in late May, and they've traveled here from all over the U.S. to work with some of the NRAO scientists for the summer. You can find them hard at work in their cubicles in the old business office:

- Wendy Bennett, Drake University, working with JP Macquart
- Kyle Borg, Austin College, working with Claire Chandler
- JoAnna Johnston, NMT; Bryan Butler
- Kasandra Jorgensen, Lewis & Clark College; Yancey Shirley
- Emily Levesque, MIT; Vincent Fish

- Tyson Mao, CalTech; Bryan Butler
- Kassandra Wells, Carleton College; Steve Myers
- Nicole Gugliucci, Lycoming College; Greg Taylor
- Ricardo Sanchez, Rutgers; Gustav van Moorsel
- Kurt Voss, Zuni High School chemistry teacher; Mark Claussen

Thanks to the scientists' efforts, and to the students for their good work giving tours at the VLA on weekends!



Rob Long shows the summer crew "space noise"

## Just What Is the ALMA Backend Lab?

Ever been down to the FIRST floor of the AOC to see what's going on? If not, you should. It's a trip through a maze of research, invention, testing, creativity.



Don't have time? Then the next time you're at your mailbox (in the AOC!), take a look at the bulletin board on the southeast wall of the lobby. EPO knows you're busy, so we've taken a look at what goes on downstairs for you. The ALMA Backend Lab is currently highlighted.

## EVLA Featured in New Exhibit

In April, a new exhibit explaining changes in the hardware and software for the VLA in anticipation of the Expanded Very Large Array was installed at the VLA Visitor Center. The flat 4-panel exhibit features the new science that can be done with the additional data we will be receiving superimposed on a background of the image of Fornax A. The expanded capabilities of the new correlator are explained with the benefit of graphics concerning recombination lines, courtesy of Bill Saxton in Green Bank. The display was fabricated by Exhib-it! of Albuquerque. Robyn Harrison, Dave Finley, Rick Perley, Walter Brisken, Kerry Shores and Mike Revnell all assisted with the design and text. Eventually a hardware display

(thanks to Dave Alderman, Gerald O'Connell and the machine shop guys) will compare old waveguide and new fiber optic cable. Visitors will get a first-hand look at one of the changes in technology since the VLA was built in the 1970s.



Gerald O'Connell and Matt Martin install the exhibit

## Sale!

A small selection of navy polo shirts are on sale at the gift shop for \$25 (regularly \$30). With your employee discount, that's \$22.50! Sizes are limited, however. We have 11 smalls, and 8 smalls and 2 mediums with pocket. Call Prescilla if you're interested: x7410.