

news notes

Making NOAA legal. A little more than a year after Ohio's Cuyahoga River, heavily polluted

with oil, burst into flame and became a smoking symbol of environmental neglect, President Richard Nixon signed an executive order creating the National Oceanic and Atmospheric Administration. In his 1970 order, Nixon said the agency would provide a "better understanding of the total environment" and help protect against natural hazards.

In the ensuing 37 years, NOAA has grown into a multibillion-dollar organization within the US Department of Commerce charged with such critical tasks as monitoring hurricanes and predicting changes to Earth's oceans. Yet NOAA's existence still depends on Nixon's executive order, and Representative Vernon Ehlers (R-MI) has introduced a bill that would "establish [NOAA] in law for the first time in the agency's history." NOAA was created out of a science organization that dates back to Thomas Jefferson.

The bill would clarify the functions and responsibilities of NOAA, Ehlers said, and "provide NOAA and its employees clear direction and the tools they require to perform critical missions and functions." It would also strengthen science by creating a deputy assistant secretary for science and education in the Commerce Department.

California Democratic Rep. Sam Farr has included a similar NOAA provision in a more wide-ranging bill that would implement the major recommendations of the 2004 US Commission on Ocean Policy (<http://www.oceancommission.gov>). JLD

A scaled-down RIA. A committee of the National Research Council has recommended that the federal government build a \$500 million rare-isotope accelerator both to maintain US leadership in nuclear physics and to "resolve scientific issues of clear importance." The recommendation by the NRC's rare-isotope science assessment committee represents a revived, but dramatically scaled down, version of the \$1.1 billion RIA facility proposal killed as too costly by the Department of Energy last year.

The committee, cochaired by former Nuclear Regulatory Commissioner John Ahearne and University of California, Berkeley, physicist Stuart Freedman, produced the report at the request of DOE and concluded that there is "a compelling scientific agenda for a future facility." It could begin operation in about 2016.

"The rare-isotope project is now unstuck," said University of Chicago astrophysicist Michael Turner, who is Argonne National Laboratory's chief scientist. Argonne and the National Superconducting Cyclotron Laboratory at Michigan State University are the "two players at the table" who would likely compete for the new facility, said Argonne director Robert Rosner.

NSCL director Konrad Gelbke said he has been planning a low-cost facility at Michigan State since RIA was killed. "Our position is we are the world leader right now in rare-isotope research and we have the best North American facility." JLD

Hazards institute. A new multicampus collaboration at the University of California focuses on studying natural

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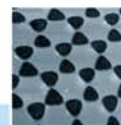


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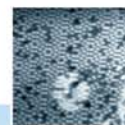
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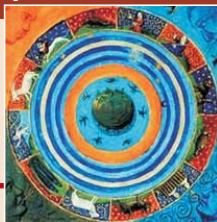
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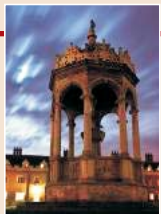
<http://www.aip.org/history/cosmology>

How humans have observed and made sense of the cosmos is the subject of **Cosmic Journey: A History of Scientific Cosmology**, the latest online exhibit from AIP's Center for History of Physics.



<http://water.usgs.gov/waterwatch>

From the US Geological Survey comes **WaterWatch**, an interactive map that displays data from a network of streamflow monitors in the US. By clicking on a state, you see how the day's streamflow compares with the historical average at each of the state's monitoring points.



<http://www.cambridgeincolour.com/tutorials.htm>

The extensive set of tutorials on Sean McHugh's website **Cambridge in Colour** provides science-based advice on taking better digital photographs. McHugh's forte is long exposures under dim lighting conditions.



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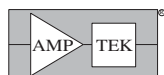
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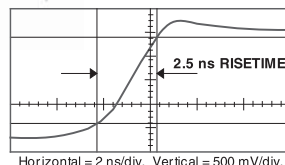
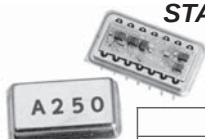
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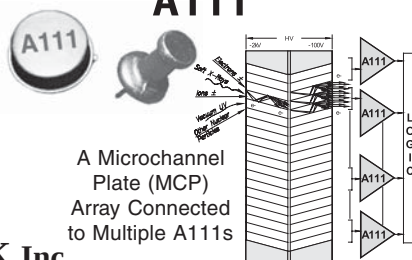
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Earthquakes, fires, droughts, landslides, pandemics, and the like are the focus of the California Hazards Research Institute. "The idea is evolving that we should take a holistic look at hazards and disasters. They have common features, and therefore there may be some underlying way to understand these complex systems from different approaches," says UC Davis's John Rundle, who was key in setting up the institute.

The institute aims to address four stages of hazards: anticipation, mitigation, response, and recovery. One of its first goals is to compile a database of institute researchers and their work. Inclusion of manmade disasters in the institute's purview is still under discussion, Rundle says.

So far, five UC campuses and the Livermore and Los Alamos national laboratories are members. They, together with the UC Office of the President, are providing seed money for the institute totaling \$140 000 a year for three years. TF

Employment data. Fewer physics bachelor's degree recipients are receiving multiple job offers and more are taking part-time jobs or are unemployed after graduation than in the past. Together, those measures reflect a strained economy, according to a new report by the American Institute of Physics on initial employment of US physics and astronomy bachelors, masters, and PhDs of the classes of 2003 and 2004.

The private sector continues to be the dominant employer of physics degree holders at all levels. After three years of decline, the proportion of new physics bachelors immediately entering the job market stabilized at 41% in 2004, down from 52% in 2000.

Salaries in the private sector remained steady for 2003 and 2004. Midrange pay for new bachelors was \$20 000 to \$36 000 for jobs outside of science, math, technology, and engineering and \$30 000 to \$54 000 for jobs in those areas; new masters earned \$43 000 to \$70 000; and new PhDs pulled in \$68 000 to \$90 000.

Some 67% of freshly minted physics PhDs took postdocs, the highest level in the quarter century that AIP has been tracking employment trends.

The *Initial Employment Report: Physics and Astronomy Degree Recipients of 2003 & 2004* is available online at www.aip.org/statistics/trends/reports/emp.pdf. Single copies may be obtained from AIP, Statistical Research Center, One Physics Ellipse, College Park, MD 20740; e-mail stats@aip.org. TF ■