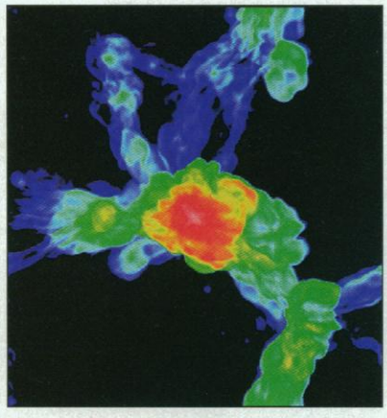
NETWATCH
edited by Jennifer Couzin

COOL IMAGES

Computerized Cosmos

No, it's not a Rorschach test. This wispy blob, generated by a supercomputer at Cornell University, maps the universe's temperature—more than 8000 cubic megaparsecs worth of the universe, that is. It's part of a gallery of dozens of stunning simulations provided by the Grand Challenge Cosmology Consortium, an eight-institution, 4-year project that unites computers and cosmology in the study of the universe's evolution. From early star formations to violent galactic collisions to dark matter's tendency to clump together over time, the images have "revolutionized our understanding" of the universe, says site designer Michael Norman, an astronomer at the National Center for Supercomputing Applications. zeus.ncsa.uiuc.edu:8080/GC3_Home_Page.html



HOT PICKS

Breathing lungs. If you thought that anatomy textbooks bare all, think again. To see the delicate insides of animals, plants, and embryos starkly reproduced by magnetic resonance imaging, tap into this database of in vivo microscopy. With the click of a mouse, you can even watch lungs at work. wwwcivm.mc.duke.edu

To the poles. Did Richard Byrd really fly his airplane over the North Pole in 1926, as he claimed? The Byrd Polar Research Center documents this controversy and tackles other polar issues, as well as putting out an "Ice Sheets" newsletter and maintaining an extensive collection of polar-related links. www-bprc.mps.ohio-state.edu

Cog in the works. Most robotics projects focus only on imitating the human senses and motor abilities. But MIT's Cog Project is in a different realm altogether—it's working to construct Cog and other robots whose intelligence may one day shed light on our own. www.ai.mit.edu/projects/cog

NET NEWS

School Wiring Program Snarled

With Labor Day and school days fast approaching, thousands of classrooms that had hoped to get wired to the Internet this summer will have to stick to teaching by the book for at least a little while longer. An innovative national program called E-rate is struggling to divvy up sharply curbed funds to more than 30,000 applicants, including school districts, individual public and private schools, and public libraries.

In the increasingly Web-based world, only a quarter of all schools have Internet access, says Jodie Buenning, deputy director of outreach and communications for the Schools and Libraries Corporation, a nonprofit that oversees E-rate. The initiative, funded by phone companies and launched last January, intends to provide schools with bargain digital wiring, telecommunications service, and Internet access, and will be handing out discounts on all three ranging from 20% to 90%. But in June, in response to phone company concerns, the Federal Communications Commission cut the E-rate budget from $2.25 billion to less than $1.4 billion for 1998.

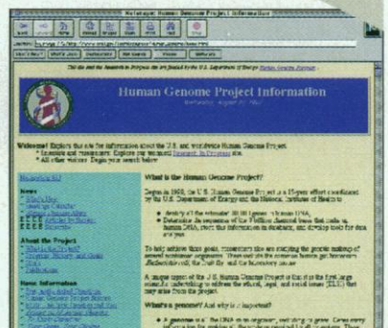
The result could be a big setback for school districts that are not poor enough to receive the maximum discount from E-rate but lack the means to raise money for internal wiring, the only service provided to poorest schools first, says Michelle Richards, director of federal programs at the National School Board Association. For now, she says, many schools are looking to winter and spring breaks to do the wiring—except for those few who signed summer construction contracts and must now wait for promised reimbursement.

SITE REVIEW

Gene Hunters Central

Eight years old and going strong, the effort to map the human genome is one of the most ambitious scientific projects ever undertaken. Those itching to learn more about it will find a deluge of information at the Department of Energy's project site, designed to attract everyone from seasoned researchers to high school students. One big draw for scientists is a technical section with abstracts on gene sequencing and mapping, not to mention new pages—discussing the impact of genetics on medical therapies—that are slated to come online in October.

www.ornl.gov/hgmis



But the site's first priority is "making human genome science accessible" to the general public, says Betty Mansfield, editor of *Human Genome News*, which is posted on the site. With that goal in mind, the site has expanded to include a student primer on molecular genetics and a library of articles covering ethical, legal, and social issues. And those who leave with their heads spinning can rest assured: Mansfield's team of scientists answers every question from site visitors.

SCIENCE ONLINE

Physicists have struggled for years to prove that many materials become metallic, and perhaps even superconductors, when subjected to high pressures. The Perspective on p. 1296 discusses an innovative way to measure the electrical properties of cesium iodide, which becomes a superconductor under high pressure. Turn to the online article for links to superconductivity and condensed matter physics. www.sciencemag.org/cgi/content/full/281/5382/1296

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