

## HOT PICKS

Channel surfing. The Internet's sprawling ion channel resources may seem overwhelming, but this Web page leads to several choice sites, including databases, images, and course material. phy025.lubb. ttuhsc.edu/Neely/ionchann.htm

**Curling up with cosmo**. If the cosmological constant sounds intriguing but way intimidating, pay a visit to the Cosmology Tutorial, which explains cosmology at a high school math level. The site answers questions like "Where is the center of the big bang?" and includes bulletins on the latest

cosmology news. www.astro.ucla.edu/~wright/ cosmolog.htm

**Diversity depot.** Chemistry is being transformed by the combinatorial approach using molecular building blocks to create vast libraries of molecules that may hold useful compounds. Combinatorial chemists can keep up with this fast-moving field at the Diversity Information Pages, which track patents, articles, symposia, jobs, and more. www. 5z.com/divinfo

Microbial soup. Want to compare your Haemophilus influenzae gene to that in some other bug, or bone up on microbial genomes in general? From sulfur-eating Archaeoglobus fulgidus to Yersinia pestis, which causes plague, The Institute for Genomic Research's Microbial Database takes you to the Web sites of the world's microbial genome projects—18 published and more than 60 in progress. www.tigr.org/tdb/mdb/mdb.html

**Quantum cache**. It may seem like science fiction, but researchers this year showed that teleportation—on a quantum scale—can be done. This page at Los Alamos National Lab offers an introduction to quantum computing and cryptography, as well as a slew of outside links, including labs that made headlines this year. p23.lanl.gov/Quantum/quantum.html#contents



COOL IMAGES The Mind at Play

This shot of Albert Einstein cycling at a friend's house in California is one of the most famous photos of the physicist, whose 1917 proposal of a weird cosmic energy seems to be verified in this year's Breakthrough. For this and other snapshots of Einstein—scrawling on a blackboard, holding a puppet of himself, posing with Charlie

BREAKTHROUGH OF THE YEAR

From peddling a pedaling Einstein to combining chemicals, NetWatch will stop at nothing to take you beyond our pages and onto the Web for useful sites that complement *Science's* Breakthrough of the Year issue. The online version of our Breakthrough section, which features the hottest research findings of 1998, is enhanced with links and references. www.sciencemag. org/content/vol282/issue5397/ #special

Chaplin—click over to Caltech's photo archive.<sup>\*</sup> Another photopacked site in Germany includes family shots and Einstein's high school diploma.<sup>†</sup>

If that doesn't satiate your thirst, visit the American Institute of Physics's 1996 Einstein online exhibit, one of the nicest Einstein sites on the Web.<sup>‡</sup> Here you can learn about discoveries such as gravitational lenses, read essays, see original papers, and even listen to a recording of the genius explaining  $E = mc^2$  in his charmingly accented English.

\* www.caltech.edu/cgi-bin/arcquery

<sup>†</sup> www.th.physik.uni-frankfurt.de/~jr/physpiceinstein.html <sup>‡</sup> www.aip.org/history/einstein

SITE VISIT

## For Whom the Clock Tolls

From light-sensing pigments in plants to a new jet-lag cure (shining light behind the knee), chronobiologists offered us a bumper crop of findings in 1998. For a rundown on the circadian clocks driving these and other developments, check out the Web site of the Center for Biological Timing, a university consortium based at the University of Virginia and funded by the National Science Foundation.

Illustrated essays on the Clock Genome Project and on the biomathematics of clocks, linked to a glossary, help this site stand out. Also posted is a tutorial that reviews circadian clock history—a French scientist did the first experiment in this realm on a heliotropic plant in 1729—and topics such as restlessness in the elderly and clocks in various organisms. Aimed at high school students but "hierarchical in complexity" such

that basic pages lead to more advanced ones, the tutorial will be gussied up with interactive simulations next year, says Web master Hal Noakes. Also posted are online science projects in which students can use real-time data from a light-and-dark experiment with hamsters.

Researchers can tap a monthly bibliography of new biotiming publica-



tions, a meetings calendar, and outside links: symposia proceedings, the Society for Research on Biological Rhythms, and a widely used atlas depicting how clocks

www.cbt.Virginia.edu

respond to stimuli. Another offering is a set of classic papers by Colin Pittendrigh, who in the 1950s made the key finding that the period of a biological clock doesn't change with temperature. Also check out the links on related topics, including sleep and melatonin.

Send Internet news and great Web site suggestions to netwatch@aaas.org