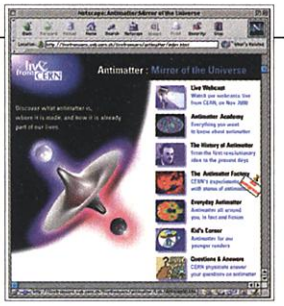
NetWatch

edited by John S. MacNeil



EDUCATION

Live From CERN: Antimatter!

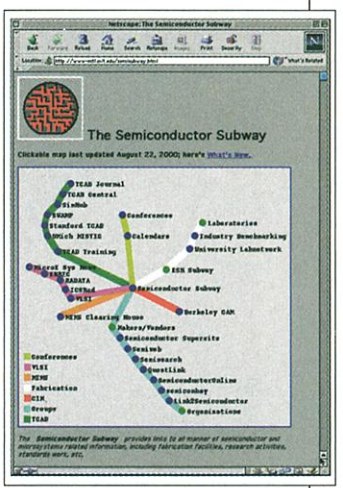
Although not the most intuitive of particle physics concepts, antimatter will nevertheless soon star in its own Web cast. On 18 November, the curious—from students to physicists—can click into the control room of the Antiproton Decelerator at CERN, the European particle physics laboratory, for live footage of antimatter production. To find out what that means, the site provides an explanation of the experiments, as well as the history and motivation behind the drive to use low-energy antiprotons to produce antihydrogen, otherwise known as antimatter. The site discusses current and possible future applications of antimatter, including its use as a rocket fuel. But not just yet—the efficiency of the antimatter energy production process is just 0.00000001%.

livefromcern.web.cern.ch/livefromcern/antimatter/index.html

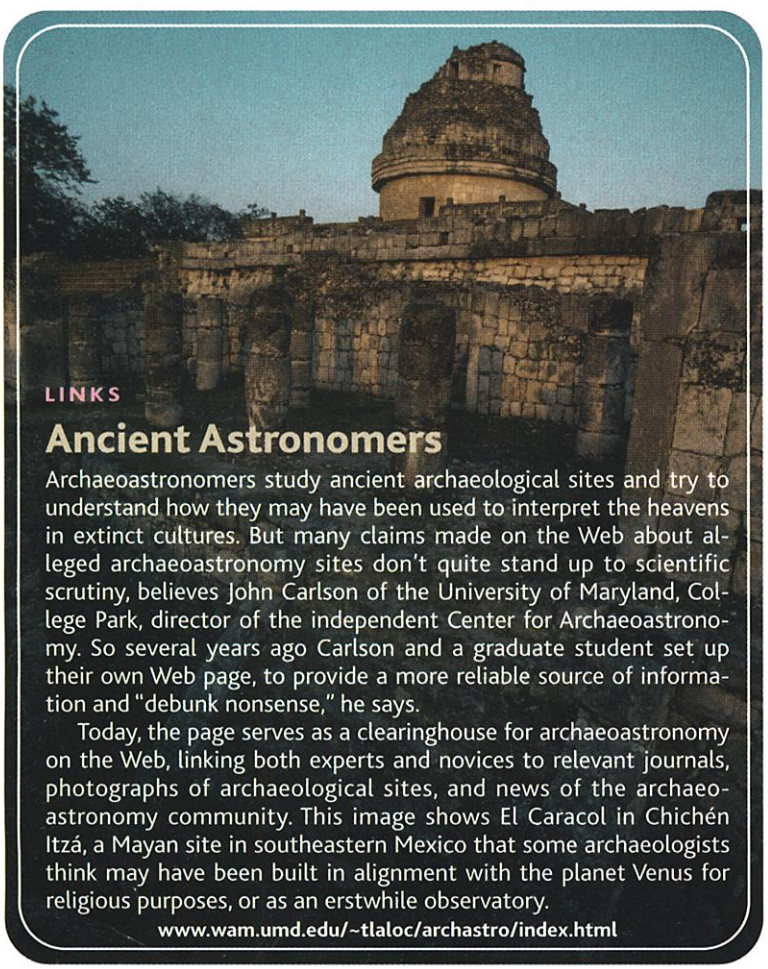
DIRECTORIES

Semiconductor Subway

Traveling a typical city subway, you might, if you're lost, consult a map to see what color train will take you to your destination. The Semiconductor Subway is organized along similar lines. For information on upcoming conferences, for instance, follow the yellow line. For links to Technology Computer Aided Design, take the green line. Or, for an update on fabrication facilities and a link to the Competitive Semiconductor Manufacturing Program, an offshoot of the University of California, Berkeley, hop on the white line. The MIT-sponsored site is refreshingly navigable and also links to separate subways on vendors, laboratories, and semiconductors and the environment. After switching trains, catch the pink line for information on the NSF/SRC Engineering Research Center for Environmentally Benign Semiconductor Manufacturing. All aboard!



www-mtl.mit.edu/semisubway.html



LINKS

Ancient Astronomers

Archaeoastronomers study ancient archaeological sites and try to understand how they may have been used to interpret the heavens in extinct cultures. But many claims made on the Web about alleged archaeoastronomy sites don't quite stand up to scientific scrutiny, believes John Carlson of the University of Maryland, College Park, director of the independent Center for Archaeoastronomy. So several years ago Carlson and a graduate student set up their own Web page, to provide a more reliable source of information and "debunk nonsense," he says.

Today, the page serves as a clearinghouse for archaeoastronomy on the Web, linking both experts and novices to relevant journals, photographs of archaeological sites, and news of the archaeoastronomy community. This image shows El Caracol in Chichén Itzá, a Mayan site in southeastern Mexico that some archaeologists think may have been built in alignment with the planet Venus for religious purposes, or as an erstwhile observatory.

www.wam.umd.edu/~tlaloc/archastro/index.html

DATABASES

The Green Scene

Can't see the forest for the trees? The U.S. Department of Agriculture's Plants Database offers clear and concise information on thousands of plants, from towering redwoods to tiny wetland sedges, for botanists and weekend gardeners alike. The site has four major branches, each laden with the fruit of knowledge. In the Gallery, users can pluck some eye-popping pictures. Plant Topics sprouts searchable databases on everything from invasive species to culturally significant plants. A "characteristics" viewer sorts species and varieties by more than 100 criteria, from their ability to withstand drought to flower color, and a tool that would draw a plant's evolutionary family tree is in the works. Plant Tools offers erosion-control and nutrient-management models, while a links page connects browsers to green pastures elsewhere on the Web. There are also downloadable plant taxonomies organized by state—and don't miss the Plant of the Week profile.

plants.usda.gov/plants/index.html

Science ONLINE

From nonaccredited enrichment programs to full-blown degrees, more classes are available online now than ever before. This week, *Science*'s Next Wave explores how to get involved in the distance education revolution and what it takes to be a technological developer, a student, or an instructor in a virtual classroom. nextwave.sciencemag.org

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

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