Vulnerabilities & Consequences of Climate Change

Coastal Ecasystems Health Communities Energy

Communities Gases)

Temperature

Precipitation

Giacial Meillary

Extreme Events

Drastic occurrences such as glacial melting and extreme weather were discussed by Rosina Bierbaum, who showed this slide at the Industrial Physics Forum.

"No single energy solution will suffice—a diversity of energy sources is required," said Mildred Dresselhaus, MIT professor and chair of the AIP Governing Board. She emphasized the role that nanotechnology plays in engineering advanced properties in solar cells and thermoelectric technology. John Turner of the National Renewable Energy Laboratory in Golden, Colorado, argued that the market will ultimately

embrace hydrogen produced by clean solar energy as the fuel of choice: "Energy payback [getting more energy out than is put in] is more important than economic payback right now." David Carlson of BP Solar predicted that advances in photovoltaic efficiency would result in imminent achievement of the \$0.10/kWh goal set by President Bush's Solar America Initiative (http://www.eere.energy.gov/solar/solar_america).

web watch

To suggest topics or sites for Web Watch, please visit http://www.physicstoday.org/suggestwebwatch.html. Compiled and edited by Charles Day



http://www.exploratorium.edu/poles

To celebrate the International Polar Year, the Exploratorium in San Francisco has created an online exhibition called **Science from the Poles.** The exhibition offers several live webcasts from

Antarctica. Topics include the ANDRILL project, which aims to extract ice cores, and the 10-meter South Pole Telescope, which aims to find distant clusters of galaxies through their effect on the microwave background.

http://athome.web.cern.ch

CERN is emulating SETI@home, ClimatePrediction.net, and other distributed software projects. LHC@home uses surplus, donated computing power to model high-energy interactions inside CERN's Large Hadron Collider. The computer infrastructure needed to run LHC@home will also be used by particle physicists worldwide to analyze data when LHC turns on next year.

http://www.capjournal.org

Communicating astronomy to the public is the ambit of **CAPjournal**, a new quarterly



journal published by the International Astronomical Union. The online journal is free. Among the papers in the inaugural issue is "Astronomy in Second Life," which examines the presence of astronomy in the popular virtual world Second Life.

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