will now have to subsidize the collapse through higher hidden costs," he says.

Among the journal publishers caught off-guard by the bankruptcy were Elsevier Science, Oxford University Press, the American Institute of Physics, the American Physical Society, the American Association of Physics Teachers, the Optical Society of America, and the American Geophysical Union. Those publishers have had to quickly develop procedures to limit their more than sixfigure losses and help their subscription bases. The publishers helped form a creditors' committee with the libraries and, in some cases, they have offered to provide the libraries with 2003 subscriptions on the understanding that the libraries let the publishers take over financial claims against RoweCom. "I have been surprised and even touched by the generosity of many publishers during this

difficult time," says Spurlock.
On 5 March, EBSCO Industries Inc, one of two remaining large international journal subscription agents, announced that it had reached an agreement to purchase RoweCom and its customer base for up to \$6 million. The final price depends on a number of conditions, including having the 25 publishers that are owed more than half the subscription money sign on to EBSCO's takeover. All the library creditors will have their 2003 subscriptions fulfilled as long as they agree to sign up with EBSCO for 2004, but publishers will not be paid in full. Instead, EBSCO is proposing putting the financial burden on the publishers. They will receive payment from RoweCom's remaining assets—the equivalent of 10 to 20 cents on the dollar-for fulfilling this year's subscriptions.

The RoweCom bankruptcy may lead to a reluctance by libraries in the future to use subscription agents, says Spurlock, as online site licenses become more attractive. "These are actually easier to handle without an agent as a middle person in the communication cycle," she says.

Paul Guinnessy

News Notes

ALMA green light. A powerful tool for peering at the early universe got the goahead on 25 February, when the North American and European partners signed an agreement to jointly build and run the Atacama Large Millimeter Array. The partners, represented by Rita Colwell and Catherine Cesarsky, directors, respectively, of NSF and the European Southern Observatory, will split the \$620 million tab.



An interferometer consisting of 64 dishes, each 12 meters across, ALMA will provide an unprecedented view of the distant, highly redshifted early universe. It will be used to study the formation of structures from organic molecules to planets, stars, galaxies, and galaxy clusters.

"ALMA heralds a breakthrough in submillimeter and millimeter astronomy, allowing some of the most penetrating studies of the universe ever made," says Piet van der Kruit, director of the Kapteyn Astronomical Institute at the University of Groningen in the Netherlands and president of the ESO council. "It is safe to predict that there will be exciting scientific surprises when ALMA enters into operation."

ALMA will be built at an elevation of 5000 meters in the Atacama desert in the Chilean Andes. Construction is slated to be completed by 2011. **TF**

Irish visitor awards. Fourteen scientists from abroad have been invited to Ireland for research stays. The new

annual E. T. S. Walton Visitor Awards, named for Ireland's 1951 Nobel laureate in physics, were created by Science Foundation Ireland (SFI). Announcing the awards on 30 January, Mary Harney, the Minister for Enterprise, Trade and Employment, said, "In making these awards Ireland is not only recognizing these outstanding scientists, we are also building links with institutions across the world of international science."

The awards are to scientists in SFI's chosen niche investment areas of information and communications technology and biotechnology (see PHYSICS TODAY, April 2002, page 26). The awards total \in 1.7 million (roughly \$1.8 million), with recipients getting up to \in 200 000 each to cover their relocation, research, conference attendance, and stipends for stays in Ireland of 3 to 12 months.

The inaugural E. T. S. Walton visitors in physics-related fields are Vladimir Buzek of the Institute of Physics in Slovakia, who will spend time at the National University of Ireland, Maynooth; Michael Carroll of Rice University (NUI, Galway); Christopher Fuchs of Lucent Technologies' Bell Labs (Dublin Institute of Technology); Atsuo Fukuda of Shinshu University, Japan (Trinity College Dublin); Mary Beth Ruskai of the University of Massachusetts at Lowell (DIT); and Stafford Withington of Cavendish Laboratory in Cambridge, UK (NUI, Maynooth).

WEB WATCH .

http://www-mtl.mit.edu/semisubway.html

Duane Boning, an electrical engineering professor at MIT, has collected a set of online information sources about semiconductors and microsystems. For convenience, efficiency, and ease of use, Boning displays the links in the form of a map of what he calls **The Semiconductor Subway**.



http://rain.create.ucsb.edu/~clang

"Like the quantum world of the quarks, leptons, hadrons, gluons, and bosons, the micro-sonic domain remained invisible for centuries. Recent advances in technology let us probe and manipulate this formerly unseen world." Thus composer **Curtis Roads** introduces his approach to computer-generated music. Roads is the associate director of the Center for Research in Electronic Art Technology at the University of California, Santa Barbara. Extracts from his compositions are available on his Web site.



http://aa.usno.navy.mil

The **Astronomical Applications Department** of the US Naval Observatory provides precise astronomical data for defense, scientific, commercial, and civilian communities. Among the offerings on the department's Web page is a tool that calculates the times of sunrise and sunset for any day of the year and any location on the globe.

To suggest topics or sites for Web Watch, please phone the editor at (301) 209-3036. Compiled and edited by Charles Day

37