

mean everything should be taken from Paris. You don't kill an institute like LURE just to move things around."

Counting salaries and four years of operation, the estimate for building Soleil totals Fr 2.1 billion. Spain plans to contribute about Fr 100 million, and other countries may also join. With the contributions of the host region and other member countries, plus savings from transferring personnel and equipment from LURE, the French government will have to chip in only about Fr 300 million for Soleil.

The approval of Soleil raises questions about France's participation in the UK synchrotron. According to the deal Allègre had made, France is supposed to contribute about Fr 350 million toward Diamond in exchange for beam time. Now, says François Wuilleumier, who oversees plans for siting Soleil in Ile de France, "it's clear that the French community won't need all these beam lines at Diamond—but we are open to crossed collaborations to make the best use of both facilities." Government-level talks are under way, and France and the UK may join each other's synchrotrons, with no money changing hands.

The Soleil design was completed two years ago, and just needs to be tweaked, says Comes. For example, "the choice of beam lines will be reviewed—there will be more for biology." A 2.5–2.75 GeV machine, Soleil will emit ultraviolet radiation and both hard and soft x rays (photon emissions up to 20 keV). It will have 14 straight sections for inserting undulators and wigglers—the key to achieving the brilliance of third-generation synchrotrons—and room for a total of 40 beam lines, although the plan is to start with 24.

Legally, Soleil will be a not-for-profit business, giving it more flexibility than it would have as a public facility. Staff members will get to choose between the security of working for the government and the higher pay of a less secure industrial job.

Construction on Soleil is slated to begin late next year, with the first beam lines to start operating in 2005.

TONI FEDER

Grunder Picks Up Argonne Reins

On 1 November, Hermann Grunder became director of Argonne National Laboratory, filling a job that had been open since Dean Eastman stepped down in June 1998. Grunder had been the director of the Thomas Jefferson National Accelerator Facili-

ty in Newport News, Virginia, for 15 years.

Heading up Argonne, says Grunder, "is an opportunity to contribute. I recognize a good research environment when I see it." Grunder wants to increase the number of biologists using Argonne's Advanced Photon Source and to strengthen ties to the University of Chicago, which runs the lab for the Department of Energy (DOE). But he's reluctant to reveal further plans: "I'm sure my ideas will change. I'm starting out with the usual set of misconceptions."

"I will work together with my friends—the directors of other national laboratories—to articulate a joint mission in science," Grunder adds. The labs have often competed with each other since money got tight after the cold war ended. But, says Grunder, "they are a larger asset to the nation if they work as a system. If we now, as a scientific community, focus on what that system can do, then that is a new paradigm."

Argonne is a multipurpose lab with an annual budget of \$465 million. Its research areas include high-energy, nuclear, and medical physics, materials science, and, at its Idaho satellite site, nuclear energy. One of the key aspects of running Argonne, says University of Chicago vice president Arthur Sussman, "is advocating it—in Congress, within DOE, with the local population, and with the lab's staff. Grunder's long experience, his understanding of the science and the processes of government, combined with his energy, made him seem like the right person for the job."

The search committee had a short list in summer 1999, but it renewed its hunt after energy secretary Bill Richardson wrote to the president of the University of Chicago on 28 July of that year: "I find it difficult to believe that there are not qualified, talented women and minority scientists who are interested in being considered for the position of laboratory director. I ask that you devote the time necessary to do a comprehensive search that yields a wide range of candidates for this top position."

"We spent almost a year on that, and identified some very attractive candidates. None of them was interested in the job," says Argonne board member Richard Quisenberry, who headed up the search. "We found that the Argonne directorship could not compete successfully with other opportunities confronting outstanding women and minority science managers."

Previously, as director of Jefferson Lab, Grunder oversaw the construc-

tion of a continuous electron beam accelerator. Before that, he held various scientific, managerial, and advisory posts at Lawrence Berkeley National Laboratory and at DOE's

Washington headquarters. Grunder came to the US in 1967, after earning his PhD in experimental nuclear physics in his native Switzerland.

Grunder succeeds Yoon Chang, who served as interim director from July 1999. Chang was a member of the search committee and has returned to his role as associate director for engineering research. Frank Fradin, associate lab director for physical, biological, and computing sciences, also did a stint as interim director.

The interim head of Jefferson Lab is Christoph Leemann, who was Grunder's deputy director there.

TONI FEDER



GRUNDER

DEPARTMENT OF ENERGY

Physics Grid Grapples with Growing Datasets

Grid Physics Network, a new system for handling vast volumes of experimental physics data, is getting started with an \$11.9 million grant from the National Science Foundation. Over the next five years, collaborators from 16 US universities will need another \$60 million to construct GriPhyN (pronounced "griffin"), which aims to connect thousands of computers involved in the Sloan Digital Sky Survey, the Laser Interferometer Gravitational-Wave Observatory, and two high-energy experiments at CERN's Large Hadron Collider (LHC) into a single virtual system.

GriPhyN's software will link existing computers, regional networks, and experimental facilities to coordinate complex data analysis. "We have computers in one location, experiments in another, and smart people somewhere else," says GriPhyN project head Paul Avery of the University of Florida. GriPhyN will consist of a hierarchy of computers, from individual desktops to national servers, sharing information, software, and computing power.