VLEPP is an outgrowth of a 300-GeV electron-positron linear collider by the same name that was first proposed for construction at Novosibirsk in 1978. The 1-TeV collider, however, now will be built at Protvino alongside UNK. This will give Soviet physicists the option of building a third high energy physics machine—an electron-proton collider that uses electrons from VLEPP and protons from UNK. The luminosity of this machine would be greater than that obtained with the HERA machine at the Deutsches Electronen Synchrotron (DESY) laboratory in West Germany, the only existing electron-proton collider in the world.

Design and construction of VLEPP is expected to be preceded by the testing of a 10-meter module built at Novosibirsk by the Nuclear Physics Institute of the Academy of Sciences of the USSR. Each segment of VLEPP is estimated to be about 5 kilometers long, assuming that accelerating gradients of 100 GeV per kilometer can be obtained.

Soviet physicists say the electron-positron collision area will be located in the middle of the collider—not at the end the machine as is done at the Stanford Linear Collider. The latter approach requires accelerating electrons and positrons in parallel and then looping them around in converging archs to a collision area. This method, while reducing construction costs and land requirements, is not deemed practicle for electron-positron colliders operating in the 1-TeV range. ■ **MARK CRAWFORD**

Uncertainties Over University of Chile

A change of rectors at the University of Chile in Santiago has brought at least a truce in a confrontation between the government of General Augusto Pinochet and critics in the university community. Regular operation of the university resumed on 2 November with the return of striking students, faculty, and staff. And at the end of last week, members of the university's faculty association, which had been seriously at odds with the previous rector, emerged from a meeting with the new rector to declare that he had their full confidence. However, major issues that produced the tensions remain unresolved.

The 11-week strike and a shutdown of Chile's largest university and leading research institution occurred after several years of gradual liberalization during which observers say there had been an improvement in the human rights environment and an increase in self-government for the university.

An impasse in the university was broken on 30 October when the government appointed a new rector, Juan de Dios Vial Larrain, after evidently engineering the resignation of the incumbent, Jose Luis Federici. Federici's rectorship had been controversial from the time he was appointed earlier this year by the government rather than elected according to university rules; there were also objections that his academic credentials did not measure up. Federici, an economist, had served as a cabinet minister in the Pinochet government. In stints as head of the national railroad and national coal companies he presided over drastic reductions in staff. As rector of the university, Federici was expected to carry out a "restructuring" of the university that critics charged had political as well as financial objectives.

Vial was also appointed by the government, but has a solid academic reputation and is not closely identified with the regime. He was dean of the philosophy school at the Catholic University in Santiago at the time of his appointment as rector of the University of Chile.

A still unanswered question is how Vial will deal with the eight deans and 150 faculty members fired and 200 students ordered dismissed by Federici. Those affected returned to the university when classes resumed, but no formal statement on their status has been issued. The new rector was quoted in the Chilean press as saying he would proceed on a case-by-case basis. New uncertainty was injected when the national governing council suspended for a full year the rules that enabled university bodies to impede Federici's actions.

Christian Orrego, a Chilean scientist who has been working in U.S. universities for several years, interprets the comments of colleagues in Chile in recent telephone conversations as indicating "a peculiar situation. The university community understands that the new rector has even more power than his predecessor, but they have returned to the university as an expression of good will, on the understanding—or hope—that he will make reasonable use of his office." Orrego is a researcher in the biochemistry department at the University of California, Berkeley, and is a member of the AAAS Committee on Scientific Freedom and Responsibility.

The University of Chile is the country's dominant university. Since Pinochet took power in a military coup in 1973, the government has perceived the university as a center of political opposition and taken a harsher line than with other institutions with measures to assert control. The government espouses free-market economic policies and government officials have criticized the University of Chile for inefficiency and lax administration.

University faculty protested reductions in university funding, claiming that the effects included a drop of 30% in purchasing power of faculty salaries since 1981. These issues prompted a faculty decision in early July not to conduct undergraduate classes. The strike action was followed by Federici's firing of 35 faculty in late July—he said that the cuts in faculty would permit raises in university salaries—and his shutdown of the university in September.

Chilean science has been set back during two decades of turbulence in the country's political life. Investment in research has lagged and numbers of Chilean scientists left to work in Europe or North America for political or professional reasons. In recent years, government officials have increasingly expressed concern, noting the Chile's relative isolation from international scientific activities. Pinochet himself alluded to the importance of science and technology in a New Year's message in 1986.

In recent years, international scientific contacts have increased. Some Chilean scientists have returned to resume their careers in Chile or to work there part of the time. In the last year, in response to overtures from Chilean scientists, several U.S. scientific organizations have discussed possibilities for increased scientific contacts and collaborative research, mainly through work with nongovernmental institutions. Last spring, a group of American scientists visited Chile under the auspices of the AAAS, the National Academy of Sciences, and American Academy of Arts and Sciences to assess the potential for joint research in various disciplines.

American scientisits active in these initiatives have regarded Chile as in a period of transition and cooperation in science as a means of encouraging liberalization. How such initiatives will be affected by events at the University of Chile is uncertain. The replacement of Federici is generally regarded as a positive development by those who favor restoration of the university's traditional autonomy, but while questions about the new rector's intentions and authority linger, a wait-and-see attitude prevails. As one academic in Santiago is reported to have commented on the faculty association's declaration of confidence in the new rector, "the question is whether he has the full confidence of the government." ■

JOHN WALSH