

Norway Establishes Abel Prize in Mathematics

In August 2001, the prime minister of Norway announced the establishment of the Abel Prize, a new international prize in mathematics. Named in honor of the Norwegian mathematician Niels Henrik Abel (1802–1829), the prize will be awarded for the first time in 2003. The prize fund will have an initial capital of 200 million Norwegian kroner (about US\$23 million). The amount of the prize will fluctuate according to the yield of the fund but will be similar to the amount of a Nobel Prize. The preliminary figure for the Abel Prize is 5 million Norwegian kroner (about US\$570,000).

The idea of an international prize in honor of Abel was first suggested by the Norwegian mathematician Sophus Lie near the end of the nineteenth century. In 1902, King Oscar II of Sweden and Norway proposed establishing the prize, but the proposal died when the union between the two nations dissolved in 1905. The current initiative for the Abel Prize came out of the mathematics department of the University of Oslo. The department is hosting the Abel Bicentennial Conference, June 3–8, 2002, to mark the 200th anniversary of Abel's birth.

The Abel Prize will be administered by the Norwegian Academy of Science and Letters. In planning for the prize, the Norwegian Academy has been in



close contact with its counterpart in Sweden, which administers the Nobel Prizes. In consultation with the International Mathematical Union (IMU), the Norwegian Academy will appoint a prize selection committee of perhaps five members and a larger scientific advisory panel of twenty to thirty members. The panel will generate nominations to be forwarded to the selection committee. The committee and panel will be international and will include a substantial number of mathematicians from outside Norway.

Various details of the prize have yet to be worked out, such as whether it can be given to more than one individual and whether recipients of the Fields Medal, long thought of as the “Nobel of mathematics”, will be eligible. But one detail has been decided: There will be no age limit. According to Jens Fenstad, a University of Oslo mathematician who worked on getting the prize established, there will also be no limitation on mathematical areas in which the prize can be given. “The quality and the acceptance by the mathematical community—these are our primary aims,” he said.

One of the goals in establishing the Abel Prize is to enhance the public visibility of mathematics and to encourage young people to study mathematics and science. Accordingly, a special Abel

Symposium will be held in conjunction with the prize ceremony. The symposium will be a conference for mathematicians but will also include activities aimed at the general public, including students and teachers.

Fenstad pointed out that the prize fits in well with Norway's efforts to be recognized internationally as a nation rich in culture and science. "We want to add the name of Abel to that of Ibsen in literature and Munch in painting" as part of Norway's international image, he said. Aligning mathematics with Norwegian culture, as well as with such issues as encouraging young people to study mathematics and the growing role of mathematics in modern society, proved an unbeatable combination. "We were almost surprised by the enthusiasm we were met with, from the IMU, from the European Mathematical Society [EMS], from the public, and from the ministry," Fenstad remarked. When the scientific community requests money from the government, the requests are usually combined with complaints about low funding for science, he noted. "This time, we came with something different and exciting."

According to Fenstad, one of the key elements in getting the prize established was the international support provided by the IMU and the EMS. Said Fenstad, "We will use the prize to better the condition of mathematics and to enhance its visibility, both at the international and the national levels."

"The establishment of the Abel Prize is a major event for the mathematics community," noted Phillip A. Griffiths, director of the Institute for Advanced Study and secretary of the IMU. "One reason, of course, is that Abel is one of the greatest mathematicians of all time; with hindsight, one sees that the whole development of the field of algebraic geometry in the 19th century was triggered in large part by the work of Abel. Second, the amount of the award recognizes mathematics as being at least on par with physics, chemistry, medicine, economics, etc. This comes at a most appropriate time for the field, which is undergoing a golden age."

—Allyn Jackson