

US Stamp Honors Fermi

A US stamp to be issued this fall will honor Enrico Fermi on the centennial of his birth.

The stamp shows Fermi in 1948 and a stylized carbon atom—symbolizing graphite, the form of carbon used to slow neutrons in the first nuclear reactor. In December 1942, a team led by Fermi used that pile of uranium and graphite bricks, which was built in a squash court under the University of Chicago's football stadium, to set off the first ever self-sustaining nuclear chain reaction.

Born in Italy on 29 September 1901, Fermi was a towering physicist in both experimental and theoretical nuclear and particle physics, and was awarded the Nobel Prize in 1938. He and his family used the trip to Sweden for the Nobel ceremony to leave Mussolini's fascist Italy and emigrate to the US, where Fermi joined the faculty at Columbia University and then moved to the University of Chicago to continue his work for the Manhattan Project. He died in 1954.

In other philatelic news, stamps commemorating 100 years of the Nobel Prizes, depicting prize founder Alfred Nobel and medals, were issued in the US and Sweden on 22 March.



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The IRCEP was selected because of the department's excellent research, its "major opportunities and ideas for expansion of research, and the most impressive range of collaborative research with institutions in many other countries," says UK Engineering and Physical Sciences Research Council Chair Anthony Ledwith, who served on the SPUR judging panel. SPUR also funded projects involving sonic arts, virtual engineering, and policy at Queen's University, and molecular biosciences and Irish cultural heritage at the University of Ulster.

The IRCEP will build on Queen's University's existing strengths in condensed matter physics and materials science, plasma and laser interaction physics, and atomic and molecular physics. "It's an absolutely fantastic opportunity for us," says physics chair Kenneth Bell. "The three research divisions are physically separated. This will let them come together and allow them to do collaborative research."

Most of the money will go for a new building abutting the current physics department. There won't be new faculty jobs. But, with the IRCEP meant to strengthen international collaborations as well as interdepartmental ones, there will be some funding for bringing in graduate students and visiting professors from abroad. "One of the difficulties we have is that we are very parochial. We are conscious all the time that we need to look outwards," says Bell.

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Elachi Named JPL Director

Capping a 30-year career at NASA's Jet Propulsion Laboratory, Charles Elachi will step into the top job on 1 May. He will succeed Edward Stone, who, after a decade at the helm of the planetary exploration lab, will return to research and teaching at Caltech, which runs JPL.

"I have in mind to keep JPL at the forefront, exercising boldness and ingenuity," says Elachi, listing projects "that are almost impossible": putting a permanent robotic presence on Mars, piercing the ice of Jupiter's moon Europa, exploring under extreme radiation environments, bringing home stardust from the tails of comets.

Elachi joined JPL in 1971, after earning his PhD in electrical sciences at Caltech. His bachelor's degree is in physics from the University of Grenoble, and he holds three master's degrees, including one in business administration from the University of Southern California.

Elachi specializes in radar and remote sensing. He heads the team that is imaging Saturn's moon Titan from the Cassini spacecraft. He is also involved in mapping Earth's surface with interferometric radar. That work, he says, "will definitely shed light on the physics of earthquakes. It could have dramatic scientific and humanitarian consequences."

"One of Elachi's biggest challenges will be to get JPL's estimates in line

with real costs—bidding low enough to win projects, but high enough to pay for them," says Mike Drake, who heads the University of Arizona's Lunar and Planetary Laboratory.

Elachi will have to continue with the "faster, better, cheaper" mode, says Edward Weiler, NASA's associate administrator for space sciences. "The revolution is not complete. There's always pressure to go back to the old way of business"—sending up fewer, larger, costlier missions—"but putting all of one's eggs in one basket is a dangerous way to do business."

The double debacle in 1999, when NASA lost two Mars missions, Weiler adds, means Elachi "has an advantage that most people don't have—he's known failure. It builds character and leadership."

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Shotter to Lead Canada's TRIUMF

Alan Shotter, an experimental nuclear physicist at Scotland's University of Edinburgh, will begin a five-year term this September as the director of TRIUMF, Canada's laboratory for particle and nuclear physics in Vancouver. He succeeds Alan Astbury, who is returning to particle physics research as a professor emeritus at the University of Victoria.

Last year the lab, which is federally funded and run by a consortium of five universities, won a budget increase of 20% to Can\$200 million (US\$129 million) over the next five years. Indeed, the lab's outlook is much better today than when

Astbury took the reins in 1994. At that time, the Canadian economy was shaky and plans for a \$700 million particle accelerator at TRIUMF had been abandoned in the wake of the US cancellation of the Superconducting Super Collider. "TRIUMF came very close to being



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