

antiproton collider. He delighted in the challenge of designing and building the novel uranium-liquid argon calorimeter and provided many of the project's ideas.

Good was strongly connected to the theoretical development of physics. Besides his introduction of the neutral K phenomenology and diffractive dissociation of the proton, he published influential papers in 1966 on neutral leptonic currents with Louis Michel and Eduardo DeRafael and in 1968 on the $\Delta I = 1/2$ rule with Michael Nieto. With Chen Ning Yang, he explored the effect of multiple collisions within the same particle-nucleus interaction, opening the way for subsequent investigations of multiple parton interactions in hadron collisions and the study of heavy-ion collisions.

One of his most enduring theoretical interests was the nature of collapsed stellar objects. Shortly after the first observation of pulsars in 1967, he developed a theory of pulsars as rotating neutron stars—independently of Thomas Gold. Treating these objects as massive generators with peculiar quasicrystalline composition, he was able to show remarkable agreement with observed pulsar period changes and radiation patterns.

Good helped to direct the larger community of particle physics in many ways. He served on several laboratory program advisory committees, including the one at Fermilab in its formative years. He served on the Universities Research Association's board of trustees in its early days. Good possessed remarkable insights into the way that research should and could be profitably conducted. His honesty and modesty were hallmarks, and his influence on the deliberations of science policy was profound.

We will remember Good for his many achievements. More than most, he made an impact upon the development of physics. He was an extraordinarily imaginative thinker, who saw connections and new ways of looking at problems. His development of a new generation at Stony Brook through his scientific leadership and the nurturing of young physicists has left its mark on the field and on the university. We will miss his clear-sighted and honorable approach to physics.

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Melissa Charalambous

Melissa Charalambous, whose meticulous experiments led to several discoveries in the field of superconductors, died on 17 May in Athens, Greece.

Melissa was born on 26 April 1965 in Geneva, Switzerland, where her parents were working at the time. As a brilliant student at the Aristotle University of Thessaloniki in her home country of Greece, she was among a small number of students selected by the French Embassy in 1987 to undertake graduate study in France under a binational scholarship program. She chose the University of Grenoble, where she earned the French equivalent of a master's degree in physics in 1988.

For her PhD, which she earned in 1992, she moved to the Centre de Recherches sur les Très Basses Températures (CRTBT), where she demonstrated the melting of the vortex lattice in yttrium barium copper oxide (YBaCuO) by very precise magnetoresistance measurements along the *c*-axis in very small ($20 \times 50 \times 150 \mu\text{m}$) single crystals. To make the requisite transport measurements, she developed an entirely new three-dimensional lithography technique, for which the normal metal-superconductor interface needed exceptional care. In responding to that experimental challenge, she showed her ingenuity and knowledge of instrumentation, as well as the remarkable tenacity that so impressed all her colleagues. This landmark work brought her many conference invitations and also the city of Grenoble's Young Researcher Prize in 1993.

From 1992 to 1994, Melissa was a postdoctoral associate at IBM Corp's Thomas J. Watson Research Center in Yorktown Heights, New York. By very delicate local Hall magnetometry measurements of ultrapure untwinned YBaCuO or single crystals of barium strontium calcium copper oxide (BSCCO), she showed that the vortex lattice transition was of first order.

Joining the staff of the National Center of Scientific Research (CNRS) in 1994, she returned to the CRTBT, where she developed three principal lines of research that exemplified both her preference for the most lively topics in fundamental physics and her exploitation of sensitive experimental techniques.

First, by very precise measure-



MELISSA CHARALAMBOUS

ments of very small thermal capacities, she demonstrated both the latent heat of fusion of the vortex lattice and also the asymmetry of the critical exponents in zero field at T_c on the specific heat curve of a very pure YBaCuO single crystal. Second, she initiated an angle-resolved tunnel effect study to determine the symmetry of the order parameter of high- T_c superconducting compounds. Third, in collaboration with chemical synthesis laboratories, she took an active interest in the preparation of new superconducting materials based on mercury.

Dynamic and warmhearted, Melissa knew how to spread her enthusiasm to those around her. The quality of her results brought her invitations to various conferences, where the audiences appreciated her power to convince. Her qualities as a group leader and her open-mindedness became apparent early in her brief career. Responsible for two thesis students and two postdocs, she also set up a network of collaborations involving researchers in Grenoble, the US, Canada, and several other European countries. Conscious, too, of the need for links with industry, she was the driving force behind an initiative supported by the French Rhône-Alpes administrative region concerning new Hall effect field sensors.

Supported by a particularly valiant family, she fought unremittingly against her illness. She was an example to all her colleagues at CRTBT and to all who knew her in the scientific community.

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