the physics department.

The IOP awarded the Paul Dirac Medal and Prize to **Ian Percival** for "his distinguished contributions to the interpretation of quantum theory, to quantum and classical dynamical chaos, and to atomic and molecular theory." Percival is a research professor of physics at the University of London's Queen Mary and Westfield College.

Frances Ross of IBM's Thomas J. Watson Research Center in Yorktown Heights, New York, garnered the Charles Vernon Boys Medal and Prize. She was honored for "ground-breaking contributions to real-time visualisation of materials growth and processing using novel electron microscopy techniques leading to a deeper understanding of oxidation, etching and thin film growth."

The IOP presented the Kelvin Medal and Prize to **John Anthony Scott** for "championing the cause of physics in Ireland through an exceptional gift for teaching, demonstrating, organising and enthusing." He was also praised for "enabling invaluable mutual trust and friendship to be established between those who love physics both in Ireland and in Britain." Scott is a senior lecturer in the department of physics and the director of public affairs at University College Dublin.

The winner of the Duddell Medal and Prize was **Rex Watton** of the UK's Defence Evaluation and Research Agency. Watton was recognized for "over 30 years of seminal contributions to the understanding and application of thermal imaging principles, to the maturing of the appropriate technology and to its eventual commercial exploitation."

The IOP's new honorary fellows are **Michael Berry**, the Royal Society Research Professor at the University of Bristol; **Stephen Hawking**, the Lucasian Professor of Mathematics at the University of Cambridge; **Peter Higgs**, a professor emeritus of physics at the University of Edinburgh; British-born **Anthony Leggett**, who holds the John D. and Catherine T. MacArthur Chair of Physics at the University of Illinois at Urbana-Champaign; and **Roger Penrose**, the Rouse-Ball Professor of Mathematics at the University of Oxford.

IN BRIEF

At a ceremony this month in Bonn, Germany, the Deutsche Forshungsgemeinschaft will present the Eugen and Ilse Seibold Prize for the Promotion of Science and Understanding between Germany and Japan to two scientists, one German and the other Japanese. The recipients will be **Hans-Joachim Queisser**, a founding director of the Max Planck Institute for Solid State Physics in Stuttgart and a director of the National Institute for Advanced Interdisciplinary Research in Tsukuba, Japan, and **Yasuo Tanaka**, director of the liaison office in Bonn of the Japan Society for the Promotion of Science.

John Larese and **Laurence Passell** of Brookhaven National Laboratory have won the Department of Energy's 1998 Materials Science Award. The cash award of $50 000 recognizes "their pioneering work on neutron scattering studies of films adsorbed on graphite and magnesium oxide surfaces."

Jerry M. Woodall, past president of the American Vacuum Society, joined the Yale University faculty in January as the C. Baldwin Sawyer Professor of Electrical Engineering. He was previously the Charles William Harrison Distinguished Professor of Microelectronics at Purdue University.

The Association of American Publishers awarded its prize for the best professional and scholarly book of 1998 in physics and astronomy to *New Perspectives on the Earth's Magnetotail*, published by the American Geophysical Union and edited by **Atsuhiro Nishida** of the Institute of Space and Astronomical Science in Sagamihara, Japan; **Daniel N. Backer** of the University of Colorado at Boulder; and **Stanley W. H. Cowley** of the University of Leicester in England. The association also awarded its 1998 honorable mention for the best single issue of a journal to the American Institute of Physics's *Chaos*, volume 8, number 1, edited by **David K. Campbell** with guest editor **Arthur T. Winfree**. The issue focused on fibrillation in normal ventricular myocardium.

The new chairman of the Coalition for Plasma Science is **Gerald L. Rogoff**, an independent consultant and president of Plasma Associates. The coalition, which the APS division of plasma physics recently joined, works to increase nonscientists' awareness and understanding of plasma science.

John Rumble Jr, chief of the standard reference data program at the National Institute of Standards and Technology in Gaithersburg, Maryland, has been elected president of the Committee on Data for Science and Technology (CODATA).

OBITUARIES

Alexey Andreevich Anselm

Alexey Andreevich Anselm, one of the leading Russian physicists, died of cancer on 23 August 1998 in Boston. He was director general of the St. Petersburg Nuclear Physics Institute from 1992 to 1994, after having headed its theory division for 14 years.

Born on 1 July 1934 in Leningrad (now St. Petersburg), Alyosha received his PhD in physics in 1961 from Leningrad State University.

His first appearance in physics was dramatic. In 1959, Landau and others were trying to prove that zero charge was the only possible regime in field theory, even in four-fermion interactions (in which the sign of the coupling can be arbitrary). By considering a fermion model with several flavors in two dimensions, Alyosha proved, first of all, that Landau was wrong (Landau had used an improper cutoff procedure), and, what was more important, discovered that the model was asymptotically free—that is, the effective interaction logarithmically tended to zero at small distances. Published in 1959, Alyosha's paper was the first treatment of this highly important and general phenomenon. (The Anselm model was rediscovered in 1974 and is now called the Gross–Neveu model.) At first, Landau reacted angrily, but quickly realized his error. Subsequently, he and his circle were respectful toward, and even slightly apprehensive about, Alyosha.

Next in Alyosha's research career was a period (1961–70) of work on Regge poles. He became one of the leading figures of the Leningrad school of high-energy physics, which was headed by Vladimir Gribov. Together, they undertook state-of-the-art explorations of the properties of Regge poles, especially those close to experiment. Enormously prolific, their group discovered many subtle and beautiful features of Regge poles.

It must be said that, despite its excellence, the members of the Leningrad school were somewhat intolerant about field theory. Alyosha was a notable exception—much to my benefit and, perhaps, that of others. Apart from providing much-needed moral support, he helped me to publish papers on renormalization group analyses of deep inelastic scattering, which, in the late 1960s, were considered pathological. This kind of personal assistance reflected some of his best qualities—namely, his benevolence, common sense and an intellectual ability that was never obscured by prejudices. He also had wonderful intuition,

and his forecasts, both in science and in life, were unusually accurate.

In the 1970s, Alyosha felt that his work on Regge poles and Regge cuts was more or less complete. It had been very fruitful, with many experimental checks and predictions, and could have continued for a long time, but his inner voice told him to switch fields. Thus prompted, he began exploring the Higgs sector in gauge theories. He proposed many elegant schemes and predicted the existence of light particles resulting from broken symmetries, which I think are very likely to be discovered in the future, since their reason for existence is very generic.

Later, in the 1980s and 1990s, Alyosha had the brilliant and original idea to consider the coherent pion field produced at high energy and to explore its experimental implications. Still in active development, the subject is now being worked on by many people.

Alyosha was extraordinarily talented. His was not so much a technical talent, but some intrinsic feeling of right and wrong, plus the ability to express this feeling with elegance and clarity. He was one of the most engaging people I have ever known, and was often surrounded by the scientists, artists and poets who were his friends. He was a wonderful teacher—always helping and never interfering—and guided many very successful students. In the difficult times of the Soviet era, he was one of the very few who never lost face or dignity. I miss him deeply.

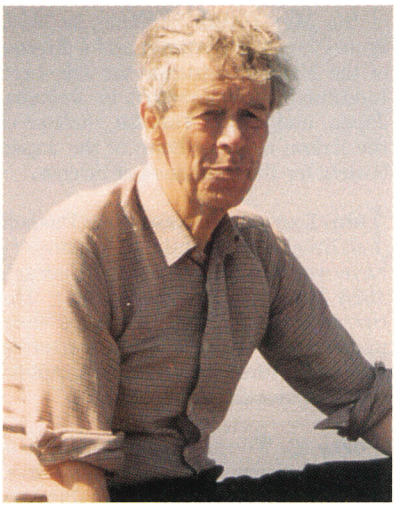
ALEXANDER POLYAKOV
Princeton University
Princeton, New Jersey

David John Tritton

The eminent fluid dynamicist David John Tritton died of coronary artery disease on 24 April 1998 in Austin, Texas. David is best known for his lucid, widely acclaimed textbook, *Physical Fluid Dynamics* (Oxford University Press), which was first published by van Nostrand in 1977 and is still in print in its second edition.

Born on 26 July 1935 in Slough, England, David earned a BA in natural sciences from the University of Cambridge in 1956. He stayed at Cambridge to do a PhD at the Cavendish lab under the supervision of the renowned fluid dynamicist Alan Townsend. For his thesis work, he experimented on flow past cylinders and free convection. After earning his doctorate in 1960, David carried out postdoctoral research in the department of aeronautical engineering at the Indian Institute of Science in Bangalore.

In 1963, Keith Runcorn recruited



DAVID JOHN TRITTON

David to a lectureship in the physics department of the University of Newcastle upon Tyne. Runcorn, who was building up a strong and distinctive research school in geophysics and planetary physics, recognized the crucial role of fluid dynamics in the development of planetary geodesy and geomagnetism there.

Runcorn's judgment was proved right. David strengthened the role of fluid dynamics in the department's geophysical research, and he built a productive group that conducted laboratory experiments on a wide variety of related problems, including convection, rotating flows, stratified flows and turbulence. David also broadened the department's interests to include atmospheric and oceanic problems, and he established fluid dynamics as a key component of the undergraduate physics curriculum—a characteristic shared by few other British universities.

David based his internationally famous *Physical Fluid Dynamics* on the distinctive undergraduate course he developed at Newcastle. The book remains unsurpassed in its presentation of the subject from a physicist's point of view. With its many illustrative examples from laboratory experiments, simple, clear arguments and a bare minimum of carefully chosen mathematical analyses, the book is not only unique, but also a favorite of the many students and researchers who have bought or borrowed it.

Following Runcorn's retirement, geophysics research at Newcastle began to decline in the mid-1980s, and David opted to take early retirement and looked abroad for opportunities to concentrate on research again. In 1991–93, he worked at L'Institut de Mécanique de Grenoble (IMG), primarily with Gabriel Chabert d'Hières and Dominique Renouard's group on rotating boundary currents.

In 1993, when his wife Sheila became ill with cancer, David largely withdrew from professional activities to care for her in Newcastle. However, he stayed in contact with research, using his old department as his base. Nonlinear characteristics of compound pendula formed the focus of his research.

After Sheila died in 1996, David began to travel to scientific meetings again and to strengthen his existing connections with other research groups. In early 1998, he moved to the University of Texas at Austin, to work with Harry Swinney on aspects of Couette flow.

During his too-short stay in Austin, David interacted with colleagues from several departments, as well as in Swinney's Center for Nonlinear Dynamics. He enjoyed his new lease on life, and presented a short course in the physics department on turbulence.

David was genuinely interested in all branches of fluid dynamics and, because of his exceptional physical insight, could shed light on fluid dynamical problems that were wholly new to him. Whether he was engaged in informal discussions, reviewing papers or examining PhD students, his approach was always underpinned by intellectual rigor.

David's many friends will recall his puckish humor, his sense of irony and his ability to detect (and gently deflate) pretentiousness. And his research students, colleagues and collaborators will attest to his firm principles and to his generosity and kindness. He will be greatly missed.

HARRY L. SWINNEY
University of Texas at Austin
PETER A. DAVIES
University of Dundee
Dundee, Scotland

Mark Joseph Comella

Mark Joseph Comella, whose outstanding teaching at the University of Pittsburgh and Duquesne University had a lasting impact on his students, died in Latrobe, Pennsylvania, on 31 December 1998 after a long illness.

Born in Latrobe on 31 March 1958, Mark earned a BS in physics from Saint Vincent College in 1980 and a PhD in physics from the University of Pittsburgh in 1990. His thesis, which he wrote under the supervision of J. N. Bardsley, was entitled "Numerical Studies of Electrons in Time Dependent Electric Fields."

It was said that Mark was in no rush to finish his thesis work because