

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.

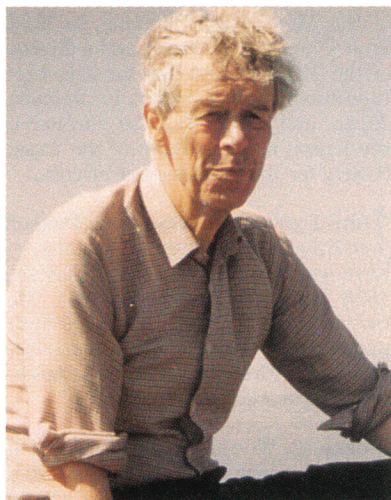
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David John Tritton

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 rotat-

ing 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. Non-linear 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
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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



MARK JOSEPH COMELLA

he so thoroughly enjoyed teaching. After joining Duquesne's physics department in 1987, he quickly established himself as one of the very best teachers in the entire university. He was the only Duquesne faculty member who could teach every physics course. Typically, he taught three courses per semester, but, occasionally, he very willingly—and with his usual competence—took on an additional teaching assignment.

A master showman, Mark employed amusing anecdotes to stimulate his students and interesting demonstrations to illustrate the principles of physics. The students loved his teaching, which inspired many of them to pursue physics. His creativity and charisma in the classroom were so great that the enrollment in the introductory astronomy course he founded increased every year—from 10 students in 1989 to 80 in 1993.

In 1994, Mark left Duquesne to work on developing the supplements to John Cutnell and Kenneth Johnson's textbook *Physics* (Wiley, 1998).

Mark had many interests outside physics. He was an avid reader, cat lover and gourmet cook. He wrote poetry, which he illustrated himself, collected antique cash registers and kept an aquarium of tropical fish. A movie fan, he was proud to have been an extra in Nicholas Roeg's *The Man Who Fell to Earth* (1976) and George Romero's *Night of the Living Dead* (1990).

Mark died in his prime before he was able to reach his full potential. He touched many, many lives in his short time, and he will be very much missed by his family, colleagues and former students.

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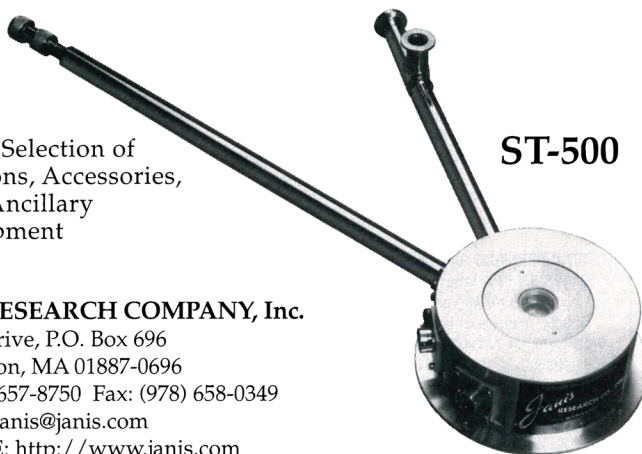
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