

WE HEAR THAT



Howel G. Pugh

American-built heavy-ion injector for the CERN Proton Synchrotron.

In 1975 Howel accepted a temporary assignment at the National Science Foundation as program director for intermediate-energy physics. He wound up staying at NSF as head of the physics division's nuclear science section. In that position, he was instrumental in creating the first joint NSF-DOE Nuclear Science Advisory Committee. When he left NSF in 1979 to return to LBL, it was because he had become persuaded that the construction of a relativistic heavy-ion collider, a project he deemed of paramount importance, was unlikely to occur without strong advocacy "from below." At LBL he helped lead the effort to convince the nuclear physics community of the need for such a machine. It was a bittersweet victory for him to witness the success of that effort, only to see the machine awarded to another laboratory.

As scientific director of the Bevalac at LBL, Howel encouraged the exploitation of the streamer chamber and the Plastic Ball detectors that cover a solid angle of 4π . Experiments using these devices resulted in the first generally recognized observations of the compression and flow of nuclear matter. By the mid-1980s it was clear that a new 4π device was needed at the Bevalac to continue studies related to the nuclear equation of state. Howel led the design effort for such a device—the EOS time projection chamber currently under construction and scheduled to be operating in 1992.

In recent years Howel's scientific focus had increasingly shifted to the high-energy heavy-ion program at the CERN Super Proton Synchrotron, where he actively participated in the

NA35 streamer-chamber effort and where he had been awarded a CERN Associateship for 1991. His final efforts were toward incorporating a time projection chamber into the NA35 experiment.

Howel was generally recognized as a spokesman for high-energy nuclear physics. The clear style of his written and spoken prose reflected the lucidity of his thinking. But in equal measure it reflected his love of and care for the English language. He was surely among the few physicists whose reference shelf included H. W. Fowler's *Dictionary of Modern English Usage*.

Although Howel was an extremely private person, others found themselves induced to confide in him, for his judgment in most nonscientific matters was as sound as it was in physics. He was a thoroughly decent and scrupulously honest person. He will be sorely missed, not only by those of us who regarded him as a friend and colleague, but by the physics community as a whole.

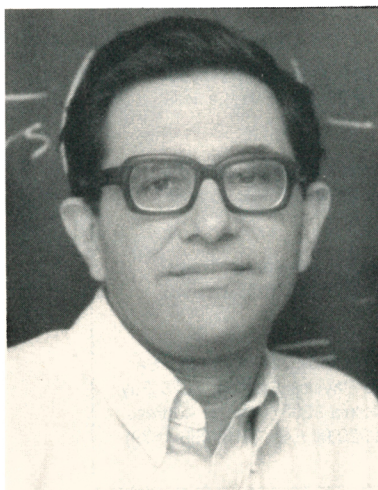
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Yossef Dothan

Yossef (Joe) Dothan, a professor of physics at Tel Aviv University, passed away very suddenly from cardiac arrest on 20 May 1990, at the age of 50.

Yossef was born in Petach Tikva, Israel. In 1961 he received his BSc and MSc from the Hebrew University in Jerusalem. His PhD dissertation, on v -e scattering, was written under the supervision of Amos de-Shalit and completed more than a decade before

Yossef Dothan



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direct experimental studies of this reaction were performed.

Yossef worked out many successful predictions of the eightfold way of Murray Gell-Mann and Yuval Ne'e-man and pioneered applications of diffractive models to elementary-particle interactions. He was particularly happy with his "unitary parity," the extension of G-parity to SU(3).

During his stay at Caltech (1964-66), Yossef invented the dynamical groups and spectrum-generating algebras, subjects that became a lifelong passion for him. He improved low-energy theorems, investigated the octet enhancement scheme and invented methods for deciding the important issue of the spin of the Ω^- . He was an inspiration to his collaborators and was always ready to lend a helpful hand. He once volunteered not to apply to a summer school so that I would be able to attend.

At Tel Aviv University, whose faculty Yossef joined in 1966, and during visits to the Institute for Advanced Study in Princeton, the State University of New York at Stony Brook, the University of Minnesota at Minneapolis-St. Paul, the University of Texas at Austin, Los Alamos National Laboratory and Duke University, Yossef continued working on a broad variety of subjects, such as soft pions, electromagnetic effects, current algebras, dynamical groups and multi-level systems. He studied solitons and tunneling with his student Herbert Neuberger, and he rediscovered the geometric (Kahler) fermions, a subject that he went on to develop with Thomas Banks and David Horn. Recently his research interests had come to focus mainly on chiral (σ) and Skyrme models, on which he collaborated extensively with Lawrence Biedenharn.

Yossef was a scientist of extremely broad abilities, able to collaborate equally well with theoretical chemists and with particle experimenters. His knowledge of mathematics was remarkable, and so was his willingness to teach it to his colleagues. He also contributed invaluable to the development of educational programs in science at our university.

Yossef's merits were not limited to his achievements in physics and his scholarly excellence. He was a truly honest and highly principled person, devoted to family, students and friends. He always gave the right advice and helped many make the right decision. His friends all over the world will always miss him.

SHMUEL NUSSINOV
Tel Aviv University
Tel Aviv, Israel ■