letters

courts if IRS persists in its illegal action.

We should encourage all eligible beneficiaries of this limited tax liability exemption to exercise their right according to law.

ELLEN J. WACHTEL
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ORNL's new name

News of the change in name of Oak Ridge Laboratory has come to many of us in the physics community as a sudden shock. This is a perfect example of an undemocratic process in which the decision to change the name of an internationally known laboratory has been made by the government without informing the people whose hard work for many decades has made the laboratory's reputation. I have nothing against President Ford recognizing Senator Holifield's contributions, but he could have done that by naming something new for Senator Holifield. It is unethical to change a 30-year-old laboratory's name without giving its people a chance to present their views. I strongly suggest that our government should restore the laboratory's original name.

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UNESCO-funded conference

During 29 July to 6 August 1975 an international conference on physics education is to be held in Edinburgh, Scotland. The conference will review a decade of change in the teaching of physics and will examine the need for further change. The plans provide for the attendance of a total of about 250 participants from all over the world.

This conference is being organized by the International Union of Pure and Applied Physics through its Commission on Physics Education. It is receiving financial support from a number of sources, including UNESCO.

We should like to emphasize that complete freedom of access to its meetings is a fundamental principle of IUPAP. The financial support of the Edinburgh conference by UNESCO is equally free of any restrictions and would not have been accepted (or acceptable) on any other terms.

We felt it to be desirable to clarify these points, in view of publicity that has been given to certain resolutions, discriminating against Israel, that were voted recently by the UNESCO General Conference. We deplore those actions as inappropriate for an organization that by charter and long custom has been nonpolitical. We would like to see these actions rescinded. Meanwhile, we want to reiterate that the Edinburgh conference will be truly international, and we hope that some of our Israeli colleagues will participate.

A. P. FRENCH
(Chairman, International Planning Committee for the Conference)
Massachusetts Institute of Technology
W. C. KELLY
(Chairman International Commission on Physics Education)
National Research Council
Washington, D.C.

Conserve tenure?

Eugene Marshalek's proposal (September, page 11) that a "permanent job exchange" be set up to loosen the frozen situation among tenured faculty in physics is a welcome beginning. But it may be viewed as counterproductive, relying as it does on the "conservation of tenure." It must be kept in mind that the "particles and holes" he envisions being created in the job-exchange system will be mainly those physicists who have kept up at least moderate interest and activity in their fields of specialization. What about the vast sea of tenured physics faculty members who are genuine dead wood? These faculty will go on occupying their tenured positions to the detriment of both tenured faculty who would like to make a change in location for one reason or another, as well as the untenured faculty who, in these saturated times, must bounce from one untenured position to another or just disappear from the scene completely.

Clearly, one improves the situation enormously by doing away with tenure. A system of semitenure could be established in its place where, upon being granted this status, a faculty member would receive contracts for five years at a time with a review of his contribution to his department and the physics profession made one year before the end of the contract. Such a system would clearly reduce the dead-wood background and would open up a quantity of new "holes" that could be filled by the "particles" among us, tenured and nontenured alike.

GARY GREENHUT
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Legon, Ghana

Quantizing common sense

Lawrence Litt does well to refer to the quotation of Niels Bohr on the complementarity of truth and clarity, in his book review of *Quantum Physics and Wave Mechanics*. (February, page 55: Bohr was asked, "What variable is com-

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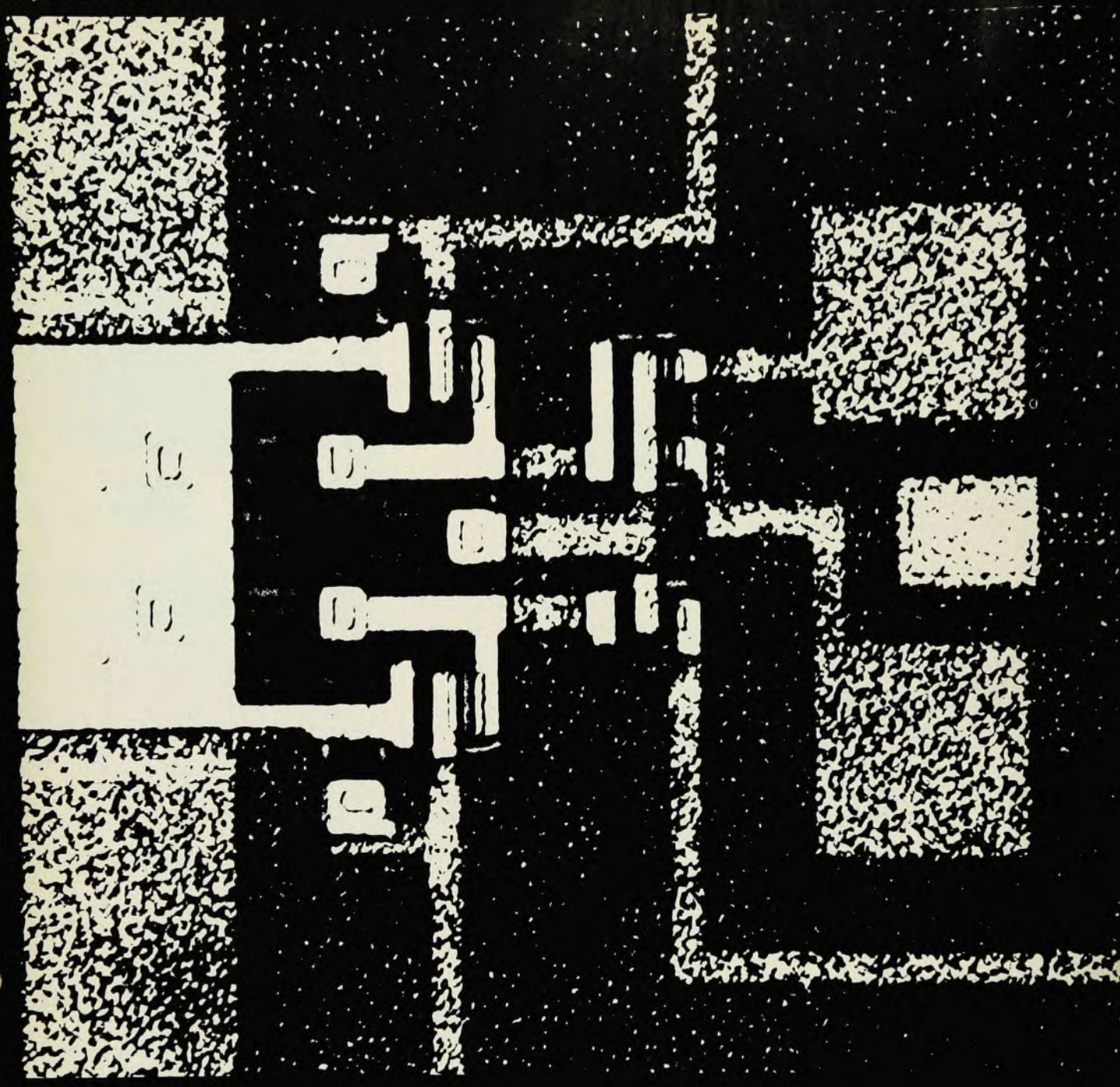

The Lincoln Laboratory, a research center of the Massachusetts Institute of Technology, is engaged in research and development in advanced electronics, with emphasis on applications to national defense and space exploration. The program of research extends from fundamental investigations in selected areas, through technology development of devices and components, to the design and development of complex systems. As an equal opportunity/affirmative action employer, we are actively seeking minority and women applicants.

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plementary to truth?" His answer: "Clarity.")

This aphorism can be regarded as a *minimum uncertainty wisdom packet*, in that it is not perfectly clear, and it is not rigorously true, but it is as clear as it can be, considering how true it is, and it is as true as it can be, considering how clear it is.

In my opinion, such an optimal wisdom packet can be defined as *common sense* (or uncommon sense, if you will), which too many people confuse with pernicious misconceptions, that lead them to act as if their notions were perfectly clear, or rigorously true, or both.

Truth eigenstates (like energy eigenstates) can take an indefinitely long time to achieve, and clarity eigenstates (like instantaneous impressions) can be misleading. Science leans toward truth, advertising leans toward clarity, and government leans toward common sense, *if* we elect people who do not confuse it with common misconceptions.

KENNETH J. EPSTEIN
Chicago, Illinois

Physics in decline

A number of recent letters have decried the present state of physics. I am also not happy with the situation, and put forth a hypothesis—not necessarily because I believe it, but because it is a possibility.

Hypothesis: Not only is the "quality" of physics per living physicist declining, but the "quality" of physics as a whole is on the decline (compared to, say, 1930).

Some arguments to support the hypothesis are as follows:

I (a) There are more physicists per unit population today than previously.
(b) Physicists as a group tend to be brighter than the population as a whole.
(c) In the past, physics was not a prestigious, profitable, or well-known profession. Consequently, only those who had a genuine talent for physics and a correspondingly high intellect entered the profession.
(d) As a result of a, b, and c, the average physicist of today is not so bright as his predecessor.

II (a) There are trends in physics research that are set by the physics community as a whole.
(b) There are pressures that cause a physicist to tend to conduct research along these trends.
(c) If by (I) the physics community is less inspired than in previous years, then the trends established will be toward mediocre research.

III (a) The large number of physicists today has resulted in an increased competition for jobs.
(b) This competition has led to an increased specialization among physicists.
(c) This narrowing of physicists has tended to impede progress as, historically, physics has tended to attract the more eclectic individual; and indeed the broader individual is more likely to be responsible for large-scale advances in physics.

IV (a) If physicists of former years were broader in interests, they would be broad variety of human types.
(b) Among these types were the comparatively narrow people who are now in positions of authority in the physics community.
(c) Narrow people are less tolerant of eclectic individuals.
(d) Thus narrowness propagates narrowness in the physics establishment, and clever people look elsewhere for a profession.

The hypothesis and supporting arguments are, for the sake of devil's advocacy, greatly overstated. I am arguing only for a statistical trend. Clearly, the very good physicist of today has nothing to be ashamed of when comparing his worth to colleagues of today or yesterday.

CARLTON FREDERICK
Cornell University

Exception to exception

In an otherwise well argued and sympathetic review (July 1974, page 50) of my book *Fundamental Interactions and the Nucleus* George London attributes to me the statement that "charge independence of the strong interaction *is* an approximate independence and not an exact one . . ." and rightly takes exception to this "flat contradiction to what particle physicists believe." However, if he had read the passage in question a little more carefully he would have seen that the statement referred quite clearly to the nuclear potential and *not* to the strong interaction. The former, of course, derives primarily from the latter but is modified slightly by virtual effects of the electromagnetic interaction and hence a charge dependence is to be expected.

The extent to which this charge dependence can be studied sensibly via effective range parameters is indeed in question following the work of P. U. Sauer (Phys. Rev. Lett. **32**, 626, 1974) although this work does not invalidate a comparison of the np and nn data, which certainly seem to show a breakdown of charge independence.

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