king, New York, 1970, page 44) and probably does not represent exact words spoken by Einstein. Einstein did make a similar, mild statement in 1954, in a footnote to an appendix in the fifth edition of *The Meaning of Relativity*.

We thank Larry Abbott for a most interesting correspondence.

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1. A. Einstein, Sitzungsber. Preuss. Akad. Wiss., 16 April 1931, p. 235.
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Four Reasons for Forsaking the SSC

The January 1990 Washington Reports section has several stories concerning the SSC now planned to be built in Texas. I suggest this project be canceled for the following reasons.

First, the physics community is doing a poor job of educating people about physics. The $5 billion or more to be spent *initially* for the SSC should be spent on improving education for millions of students instead of building a research tool for the possible benefit of a few dozen researchers and for the economic benefit of Texas. In this time of greatly unbalanced national budgets, we can't do both, and the education of many is a far more important use of the funds at this time.

Second, if physics is such an international subject, and this facility will be used by scientists from all around the world, other countries should help pay for it.

Third, the news stories indicate the use of political muscle to put and keep the project in Texas, possible uncertainties in the design, and probable significant increases in the cost of the project. I for one have no confidence in the competence of the decision to put the project in Texas. I am sure it was "bought" by the most money and power in the White House and Congress, with little regard to national need. The Department of Energy, its predecessors and Congress have a miserable record for openness, honesty and competence.

Fourth, the physics community should remember that a project of this size is going to attract a crowd similar to the politicians, bankers and promoters who have cost the citizens of the United States a $100 billion tax bill through the financially irresponsible, incompetent and unethical operations of savings banks in Texas. This crowd will force the cost to rise significantly, the quality of construction to drop, or both. Whatever reputation the physics community has is going to go down as a result of this project.

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Memories of the First Texas Symposium

In his engaging reminiscences about the first Texas Symposium on Relativistic Astrophysics (August 1989, page 46), Engelbert Schucking recalls how "[John] Wheeler's magic produced an expression of utter disbelief on the face of a most distinguished relativist." But Schucking did not expand on the nature of this magic nor explain the reason for the disbelief.

Wheeler felt that the gravitational collapse that was the center of attention at the meeting could not go on indefinitely. He proclaimed that in such a collapse, "matter will be crushed out of existence." When pressed to elaborate, he suggested that the matter would be radiated away. This remark produced a strong reaction from those who objected to violations of baryon conservation. But Wheeler remained calm and repeated his extraordinarily prescient claim. For me, his remark was the most remarkable feature of that memorable conference.

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The high point of the first Texas relativistic astrophysics meeting occurred as Harlan Smith finished his talk on the variability of the quasar 3C273. Jesse Greenstein, the next speaker, slowly walked to the front of the room, climbed the one step to the platform, turned to face the audience and said dramatically, "If 3C273 is varying in brightness, I'll eat my hat!" Don't know if he did.

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Greenstein replies: A limited answer to Vera C. Rubin's letter is that I did not then, nor do I now, wear a hat. If I doubted Harlan Smith's discovery that 3C273 varies, I should by now have eaten many hats, ornamented with artificial bitter fruit. I do not recall the event Rubin mentions; my memory of that symposium is scientifically more nourishing.

However, I note that in a paper published from the symposium, Smith credits me with explaining variability as "explicable . . . [by] changing opacity in a substantial hydrogen cloud."[1] That explanation, alas, is also incorrect. My paper on 3C48 and 3C273 from the symposium, written with Maarten Schmidt, assumed the 3C273 variability to be real and sought for a physical cause.[2] We suggested that relativistic electrons that produced the optical synchrotron continuum decayed in about a year. The emitting region could be a light year in radius if it were at high electron density. In retrospect, we should have gone further, but black holes had not yet become as fashionable as dark matter is now.

If the unfortunate conservatism of many scientists is the message of Rubin's letter, her point is well taken. But many other scientists will have to eat many hats, plates or tapes when hindsight is the mode for criticizing the past.

References

1. H. Smith, in *Quasi-Stellar Sources and Gravitational Collapse*, I. Robinson, A. Schild, E. L. Schucking, eds., U. Chicago P., Chicago (1965), p. 221.
2. J. L. Greenstein, M. Schmidt, in *Quasi-Stellar Sources and Gravitational Collapse*, I. Robinson, A. Schild, E. L. Schucking, eds., U. Chicago P., Chicago (1965), p. 200.

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Landau's Brain Injury: A Fuller Account

I read with interest I. M. Khalatnikov's article about Lev Landau in your May 1989 issue (page 34). His account of the last part of Landau's life, however, is defective. Although the error concerns the least significant part of Landau's life for physicists, some of your readers may be interested in it.

Landau was in the rear of a friend's small car one icy winter evening when there was a mild collision, as I recall the account, with a truck, and Landau's head hit the right rear doorpost. Such incidents in which there is no cranial penetration are termed closed head traumas. One typical immediate consequence is edema, with the patient lapsing into a coma. At the time, few such patients survived, and it was only with heroic