

letters

Clearly more relevant data are needed before any prediction of nuclear winter rests on a sound foundation. We hoped our article would help highlight those parameters that are key determinants of the climatic effects so that research efforts might be directed to narrowing the most critical uncertainties.

BARBARA G. LEVI
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6/86

I wish to compliment Barbara G. Levi and Tony Rothman on avoiding, for the most part, the following perversion of the discussion on nuclear winter in their article. It has been all too common in the recent spate of press treatments of the possible final-solution consequences of nuclear war to stand the discussion on its head. One reads that the conclusions are (not surprisingly) not certain. One is invited to take some comfort in this. Surely in a sane world the burden of proof is on the proponents of bearable nuclear war to prove that the cataclysmic nuclear winter will *not* occur, rather than the other way around.

W. C. MEECHAM
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10/85

'Von Kármániana'

William Sears's article about Theodore von Kármán (January, page 34) will certainly interest many of his old friends—but I am sorry to see that Frank J. Malina's name was spelled incorrectly in the illustration on page 38. Historians of engineering—and in particular of the Jet Propulsion Laboratory—may like to know that Marjorie Malina has now donated her late husband's library to the Arthur Clarke Centre for Modern Technologies at the University of Moratuwa, Sri Lanka, and it is now in the process of being cataloged.

May I add my own two favorite bits of von Kármániana to the record? Both occurred at IAF congresses. At Zurich in 1953, von Kármán was lecturing fluently in English, German and French when his attention was distracted by a handsome lady in the front row. The lecture went on and on and the audience was getting restive when the object of his concern, who happened to be my wife, whispered to me, "Do you think if I leave now he will stop talking?"

At another IAF lecture, a hapless American engineer, straining for superlatives, stated that "not only is the

curve exponential—but the rate of increase is *also* exponential!" At this point von Kármán interjected mildly, "I always thought that was the definition of an exponential function."

ARTHUR C. CLARKE
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1/86

Memories of Pauli

The recent article by Victor Weisskopf about Wolfgang Pauli (December, page 36) reminded me of a story that a certain Northwestern University professor (who will remain nameless, but who was a graduate student at Princeton while Pauli was there) used to tell in his physical-chemistry classes.

As Weisskopf noted in his article, Pauli had a young wife. She liked to dance. After a party that ended with the then graduate student dancing with Pauli's wife, she told him, "Wolfgang will drive you home." Upon reaching the car it was discovered that Mrs. Pauli had forgotten her boots, and Pauli asked the student to retrieve them. After returning with the boots he found the Paulis in the car and ready to go. When he attempted to enter the car on Mrs. Pauli's side, Pauli said, "No, over here please." When he reached the other side of the car, Pauli opened the door and took the boots. He then drove off without the student.

The point of this story is to help us remember the Pauli exclusion principle.

W. B. GLEASON
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1/86

High-school physics

The description of the high-school physics teacher's world in "The physics classroom revisited: Have we learned our lesson?" (November, page 46) is absolutely correct.

As one with 15 years' experience, usually as the only physics teacher in the school, I can attest to both the isolation and the diverse demands of the job. Not only are we expected to be up to date in our personal knowledge of physics content and teaching methods and materials, but we are also supposed to make physics "nonthreatening" to the general student body, increasing enrollment and providing opportunities for academic success while at the same time challenging the "super scientists" and "whiz kids" who pop up now and then.

The possibility of collaborating with physicists in higher education and industry in developing a more appropriate high-school physics program is exciting. We high-school teachers need professional-growth opportunities such

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