

A CALL FOR PAPERS

COMPUTERS IN PHYSICS

*A new periodical
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Computers in Physics, a combination magazine and peer-reviewed journal published bimonthly by the American Institute of Physics, is soliciting papers on computer use in physics and astronomy.

We are interested in papers which describe novel ways physicists have applied computers to their work in the lab or the classroom, as well as details of original research about computer applications in related fields such as optics, acoustics, geophysics, rheology, crystallography, vacuum science, and medical physics.

Please address all papers for this new publication to Robert R. Borchers, Editor, **Computers in Physics**, PO Box 5512, Livermore, CA 94550. Papers should be organized according to the American Institute of Physics Style Manual.

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none of his experiments involved *in situ* analyses of samples at lower-mantle pressures (virtually all were quench-product studies), he had no basis either in experiment or in theory for concluding that the perovskite is stable throughout the deep mantle. Thus, our work documents that Liu's synthesis of silicate perovskite is one of the most significant mineralogical discoveries of the past 10–20 years.

References

1. F. Birch, *J. Geophys. Res.* **4**, 227 (1952); *J. Geophys. Res.* **69**, 4377 (1964).
2. Q. Williams, E. Knittle, R. Jeanloz, in *Mineral Physics Monograph 3*, A. Navrotsky, D. J. Weidner, eds., Am. Geophys. Union, Washington, D. C., in press.

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The High Price of a Low Cost of Living

In the March 1988 issue (page 80) it was reported that an AIP survey indicated that physicists' median "cost of living adjusted" salaries are significantly higher in Albuquerque than in Philadelphia because a greater percentage of physicists in Philadelphia are employed at universities and because the cost of living is higher there. It is worth devoting some thought to what these numbers mean.

Although *median* university salaries are lower than those at government and industrial labs, the best-paid professors earn considerably more than the best-paid staffers at labs. Arguably this is because highly paid professors bring in large contracts and lead substantial research groups and therefore should be compared to lab managers and not staff. However, leading professors' "large" groups generally number fewer than 20 postdocs, students and technical aides, and their budgets are a few hundred thousand dollars. Lab managers who earn comparably high salaries are responsible for the expenditure of millions of dollars a year while their staffs number 50 and up. If we compare university physics departments with lab staff and *low-level* management, we find that the ratio of highest to lowest salary in a university physics department is roughly 3, while at an industrial or government lab it is about 2.

Although most full professors earn their keep, the effects of the wide salary distribution at universities are serious. At the low end are assistant professors who work hard, have no job security and spend their "vacations"

trying to get a little research done. If fewer young people are considering academic physics as a career, is it any wonder? Low rewards at the high end in government and industrial labs are also a problem, forcing the most experienced staffers to give up research for management or to leave for academe to improve their financial status.

Turning to "cost of living adjusted" salaries, isn't the cost of living high in New York or Boston or California because many people like these places? Isn't it simply competition for desirable houses in desirable locations that drives up their price? Doubtless a house like mine would cost several times more in New York or La Jolla. But access to the Metropolitan Museum of Art or Lincoln Center or a first-class library or a good Italian restaurant just is not available here. Looking out over Albuquerque's arid west mesa, it is easy to imagine that you are at the beach. Unfortunately it's an 800-mile walk to the waves. Most people consider certain cultural or natural advantages important to their *standard* of living. What your news story blandly called the "cost of living" includes the price of these advantages. Sure my cost of living is lower in Albuquerque, but only until I want to go bodysurfing or look at a Picasso or see a Broadway show. For those of us who like living in the boondocks there is a financial advantage. But there is no reason to shed tears for those who want to be nearer to the action.

PETER FEIBELMAN

6/88

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Keep Colloquialisms Out of Colloquia

Communication, both written and oral, is a vital ingredient of scientific research. Many books have been published on teaching scientists better writing skills. As an expatriate American working in a country where English is not the native language, I am aware of a failure on the part of some native English speakers during oral presentations at international meetings. Granted, English is the accepted language of scientific discourse, and any competent scientist can read it and usually speak and understand it. But one should not assume that scientists whose native language is not English can understand a talk given in rapidly spoken English with colloquial and even slang expressions thrown in. Yet this is frequently how talks are given.

I encountered one particularly bla-