

## LETTERS

spherons in the inner core. For example, the transition from essentially spherical symmetry to prolate deformation at  $N = 90$  is associated with the change from one to two spherons (tritons or helions) in the inner core.

The normal state of a heavy fissionable nucleus such as  $U^{236}$  is described as having moderate prolate deformation because of its inner core of five spherons with the configuration of a trigonal bipyramid. The structure with greater prolate deformation is described as having an inner core of four spherons on a line (figure 12 of reference 2) surrounded by an elongated outer core of 21 spherons. It was pointed out that "this configuration would need only a small additional deformation to reach the saddle point in the energy surface" (thus permitting spontaneous fission), and that fission in this mass-number region should be asymmetric, as observed, rather than symmetric.

The rather simple arguments presented in this 1965 paper lead reasonably directly to the conclusion that nuclei with  $A$  approximately 240 have two energy minima, corresponding to moderate prolate deformation and to large prolate deformation, respectively. Two structures are described also for nuclei with  $A$  in the region 200 to 220: one, essentially spherical, with a 4-spheron tetrahedral inner core and a second, with considerable prolate deformation ( $\beta = 0.4$  to  $0.5$ ), with a linear inner core of three spherons. Fission of this structure is symmetric.

It was also pointed out that three structures, rather than two, are expected at about  $A = 227$ —the tetrahedral inner-core structure, the linear three-spheron inner-core structure, and the linear four-spheron inner-core structure—and that accordingly the observed occurrence of both symmetric and asymmetric fission of  $Ra^{226}$  bombarded with 11-MeV protons is accounted for by the close-packed-spheron theory. The prediction was made<sup>2</sup> that nuclei such as  $Lw^{266}$  should also have three structures, including one with a linear four-spheron inner core (giving asymmetric fission) and one with a linear five-spheron inner core (giving symmetric fission). There is the possibility that the resonance integrals between these structures are small enough to permit their experimental observation; for exam-

ple, the delay time for symmetric fission of  $Ra^{226}$  after proton bombardment may be different from that for asymmetric fission.<sup>5</sup>

## References

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4. L. Pauling, Phys. Rev. Lett. **15**, 868 (1965).
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LINUS PAULING

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## APS Council vacillation

I am disappointed that the American Physical Society Council vacillated from its well reasoned position and has spent time and money on a ballot. Also I am dismayed that it permitted publication of the inaccurate statement of Jay Orear and Marc Ross. The council of the American Association of University Professors decided on 25 Oct. 1968 to move their meeting to Minneapolis and did so because the same hotel chain was glad to accommodate them there for the same dates. This action was one month before the APS Council meeting.

As an ex-Cleveland I do not accept the proposition that Cleveland hotel space is completely adequate for the APS-AAPT annual meeting.

Now the American Association of Physics Teachers has also balloted. If they had not, I suspect AAPT could get an injunction restraining the rescheduling of this joint meeting.

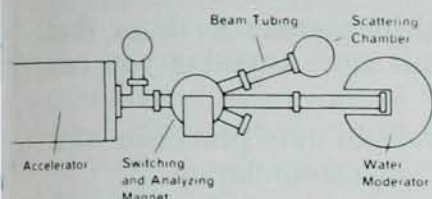
What a sad situation! I had a strong impulse to support Orear, Ross and company because I dislike Chicago as a meeting place. However, my conscience forces me otherwise. I am afraid that others with weaker consciences will seize upon this opportunity to vote us out of Chicago.

LEONARD O. OLSEN

Naval Postgraduate School

I have just returned the ballot that was recently submitted to the membership of the American Physical Society concerning the proposal to change the location of the 1970 annual meeting. I heartily support the earlier decision of the APS Council to hold the meeting in Chicago as scheduled.

It is beyond my comprehension that



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a few members of the society assume that they can speak for the majority of the membership on political issues that have not even the remotest connection with the purposes of the society. It is especially offensive to me when those few members who wish to speak for the society are influenced by left-wing political activists. I could not be more opposed to their political views.

How ludicrous and infantile that a proposal such as this should be dignified to the extent of a poll! I sympathize with the president, vice-president and council in their efforts to represent the wishes of the membership, but it is ridiculous that such matters as this be brought to the attention of the membership.

Is ours a scientific society or a political organization? I thought this question was answered adequately by the rejection of the "Schwartz amendment." If the society attempts to fulfill the role rejected, it can no longer fulfill its proper role. If and when the society fails to fulfill the purposes for which it was founded, I will promptly resign my membership.

CECIL E. LAND  
Sandia Laboratories

The question of the Chicago meeting is the second instance in which the Council of the American Physical Society saw fit to provide, to a certain undefined fraction of the membership, a wide forum for airing their political beliefs. Moreover, that the membership was polled indicates the officers' willingness to commit the society to political positions in no way related to physics, should a majority of the members so desire.

I believe very strongly that the council would violate its duty as well as the rights of all members should it support or even condone acts or changes that are basically alien to the constitution of the society.

This country provides every opportunity for political association, and there can be no moral or legal justification for imposing on members of a scientific society the political judgments of some faction.

Moreover I believe that the position of Jay Orear and Marc Ross as presented by the recent APS pamphlet is basically undemocratic and would ultimately lead to the destruction of a free physical society. It seems that we

are asked to condemn the Chicago city administration and all of Chicago as guilty by association. But what about the rioting students and their collaborators? And if we judge the political climate of a meeting place, would we not be morally obliged to clean house first in our own society? Do we require for membership a declaration of loyalty to the enlightened principles of the New Left Radicalism? Should we exclude Goldwater Republicans? Will Humphrey voters be acceptable as members? What about the servants of the "military-industrial conspiracy?"

I am deeply troubled by what I saw at the New York meeting: the political buttons, the "ad-hoc" meetings, the packed business meeting and the declarations to the press by self-elected spokesmen. I request that the APS officers take the proper initiative to avoid further political demonstrations at future society meetings and to disassociate APS officially from any such incidents should they take place despite all proper precautions.

RUDOLF E. THUN  
Raytheon Co

### Quality of urban government

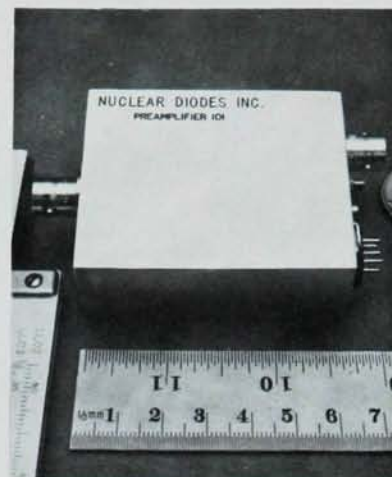
The letter by Conyers Herring (PHYSICS TODAY, February, page 11) adequately describes my attitude in the matter of the 1970 Chicago meeting of the American Physical Society. However, I do wish to add what I hope are a few pertinent comments.

One reason that strong feeling toward cancellation of the Chicago meeting seemed to be prevalent at the January business meeting may have been that it was held in New York City. Having attended several consecutive prior annual meetings in New York City, I chose not to attend this year because I am tired of being gouged by the high prices, discourteous service and generally unsuitable atmosphere and accommodations experienced in the past. I have friends throughout the physics community who concur in this judgment. Conversely at the 1968 (annual) Chicago meeting, for reasons I don't understand, the East-Coast segment of the physics community was, for the most part, conspicuous by its absence. If an annual meeting, in spite of its name, takes on a regional flavor, then such a meeting should rotate about the country from year to year. Possibly also a time of year should be

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