

# letters

## Reactions to APS support of ERA

In November the APS council voted not to schedule any more general or divisional meetings in states that have not yet ratified the Equal Rights Amendment. Following are the letters we received supporting the council's action and 60% of the letters received opposing the action. See page 12 for a box summarizing the council's action and page 82 for a summary comment by APS president Lewis Branscomb.

countries. It has never been, and should never become, the norm in this country.

If enough of us express our disagreement, perhaps there is still hope that the council will reconsider this most unfortunate decision. Failing that, the very least the council could do would be to submit this resolution to a vote of the full membership.

C. ALDEN MEAD  
1/23/79  
University of Minnesota

On page 94 of the January issue, letters by W. Moellering, James Potzick and Benny Hill—presumably typical of those received on the subject—all oppose the idea of the APS taking a formal position on the so-called ERA or taking part in the boycott of states that choose not to ratify that amendment. Moellering congratulates the leadership on its good judgment in having stayed clear of this matter. On page 101 of the same issue, however, we find that these congratulations were premature and undeserved. The council has, after all, passed a resolution to boycott non-ERA states in the scheduling of future meetings.

In future, presumably, we can expect that the APS will also boycott states that displease the majority of the council in other ways, such as levying sales taxes, going for the "wrong" candidate in a presidential election, and so on.

There are certainly many perfectly honorable APS members who have reservations about the ERA; and many more, like myself, who, though not opposed to the amendment itself, do consider such a boycott to be a reprehensible attempt to replace persuasion by coercion in the advocacy of one's political views. Such people are put in a most difficult position by the council's resolution: If they remain in the APS, they are indirectly subsidizing political activities (totally unrelated to the advancement of physics) on behalf of a cause which they may oppose, and using tactics which they may find unethical. If they resign from APS, on the other hand, they will be handicapped professionally. Making the (at least tacit) support of "official" political doctrine part of the price for the free pursuit of one's profession is a practice we normally associate with totalitarian

I am not a member of The American Physical Society, but as an undergraduate physics student I am interested in seeing physics flourish, especially in the area where I live. The purpose of the APS is to promote the science of physics everywhere. I feel that the APS council's recent decision not to schedule APS divisional and general meetings in states that have not ratified the Equal Rights Amendment is detrimental to this purpose especially in my area of the country. Therefore, as a woman and a future physicist I am writing to you to protest this action for the following reasons.

The Equal Rights Amendment is a political issue dealing with women's rights; it has nothing to do with physics. The APS, as a physics-oriented organization, has no excuse for trying to influence its members on this issue. The people of each state have the right to make their own decision about ERA without the threat of losing an important part of their professional and educational experience if they make a decision that some members of the council do not agree with.

The decision of the APS council to ban meetings in some states works an unjust hardship on students and other people in those states that have limited funds for attending these meetings. Attending general and divisional meetings of the APS is an important part of the professional educational experience of a physicist. This experience should not be denied to some people for political reasons.

The recent action of the APS council would have been unjust even if the APS had any right to influence its members politically because some of the people being hurt by this action are in favor of

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## letters

the ERA and have actively supported it. However, the recent action of the council is even more unjust than this because the APS is in reality suppressing some members of the scientific community because of their political views or the views of people in their area. It should be remembered that the APS has actively opposed such suppression by governments in other countries.

In conclusion, I would strongly urge the council of the APS to reconsider the decision not to schedule general and divisional meetings in states that have not ratified the Equal Rights Amendment.

ANN LAURIE CONN  
Auburn University  
Auburn, Alabama

1/19/79

I wish to express my pleasure at the pro-ERA resolution passed by the APS council this past 18 November. The shallowness of the stand taken by W. Mollering, James Potzick and Benny J. Hill in their recent letters opposing the APS participation in the boycott of unratified states astounds me. If sexist conditions in human society prevent fe-

males from studying physics and later pursuing careers in science, does this not work counter to The American Physical Society's purpose of advancing and diffusing the knowledge of physics? I find the suggestion that "the pursuit of physics should cut across all such questions" to be as dangerous to humanity as it is personally offensive to me. To become a physicist should not entail the resignation of social responsibility.

JAMES A. SLAVIN  
University of California  
Los Angeles, California  
5/17/79

I am writing this letter with a deep sense of outrage at the recent vote of the APS Council to boycott states that have not ratified the Equal Rights Amendment. I am very much in favor of having more women in physics, but I feel even more strongly that it is not appropriate for an organization whose goal is the advancement and diffusion of the knowledge of physics to become embroiled in this intensely political matter.

I believe that my views are shared by the vast majority of APS members, and I believe, as distasteful as it may be, that we should make our views felt in a more

concrete way, by a council recall movement if it proves to be necessary.

FRED JEFFERS  
Spin Physics, Inc.  
San Diego, California  
5/18/79

I have always derived a certain degree of satisfaction from helping the APS in its pursuit of advancement and diffusion of the knowledge of physics through regular voluntary increases in my APS membership dues. When this support, however, suddenly becomes in effect a disguised political contribution, there is no longer any justification for its continuance.

Consequently, as long as the recently passed pro-ERA resolution remains in force, I shall refrain from making any voluntary contributions to the APS.

MILOS MACHACEK  
Goleta, California  
5/18/79

I was pleased to read in the January issue that the APS has passed a pro-ERA resolution. In the same issue are three letters from men decrying any attempts to pass such a resolution. None claims that there is no discrimination against women, so I conclude all three men recognize the existence of this problem. Tell me,

## Summary of APS action on ERA

The American Physical Society Panel on Public Affairs (POPA) recommended that Council pass the following resolution on the ERA:

"The Council of The American Physical Society supports the passage of the Equal Rights Amendment as one step in increasing equal opportunity for women in our society, including helping to increase the presently low proportion of women physicists. The American Physical Society will intensify its activities to assist and to encourage women to study physics and to enter physics as a career. The various elements of the Society are asked to be guided by this important goal in the future planning of meetings and activities."

An alternative resolution debated by POPA, but not endorsed by a majority, would have prohibited sectional as well as divisional and general meetings of the Society and non-ERA states. POPA also prepared the following summary of the ERA arguments both for and against the ERA resolution (names of POPA members supporting each position are listed after each statement):

### FOR THE RESOLUTION

#### Appropriateness as an action of APS:

► It could be the most effective way to make public our concern over the inequities suffered by women under existing law.  
► These inequities are a legitimate APS concern in that they can hamper the careers of women in physics and limit access to the study of physics by women.  
► Federal courts have held that the basis for legal relief provided by ERA is not mandated

by the constitution as it stands.

► Meetings scheduled in non-ERA states do not provide for the legitimate professional needs of those APS members who feel they cannot, in good conscience, attend such meetings.

► A significant number of scientific and educational societies now adhere to this policy.

#### Effectiveness in support of ERA:

► Many cities have recently expanded convention facilities out of a strong belief in their potential benefits, giving actions of this type a visibility out of proportion to their direct economic impact.

► Because conventions must be scheduled years in advance, actions effecting meetings even beyond the ERA deadline have immediate impact.

► The media apparently perceive a nationwide "tide of sentiment" against ERA, an impression that actions of this type may help to dispel.

► The place of physics near the top of the list of predominantly male disciplines lends added significance to any such action on our part.

#### Potential impact on APS itself:

► It is public knowledge that this issue has been put before the Council, so that a decision either way will be interpreted as a statement of policy.

► Since similar groups (especially the AAAS) have endorsed this policy, and since their small numbers reflect (in part) past discrimination, it would be appropriate to give their views special weight.

► Endorsement of this action by a heavily male scientific and educational society will

be widely interpreted as a signal of our genuine commitment to enhancing the role of women in physics.

Bernard R. Cooper, Paul Craig,  
Vernon J. Ehlers, Vera Kistiakowsky,  
Robert H. March, Thomas H. Moss,  
Members of POPA

### AGAINST THE RESOLUTION

This statement has been prepared by those POPA members who refused to support an APS boycott of states that have failed to ratify the ERA. We strongly support passage of the ERA. However, a boycott by the APS has some potentially deleterious effects on the APS itself, for reasons elaborated below. Weighing these deleterious effects on the APS itself against the comparatively small impact of a boycott by the APS, we conclude that support of an APS boycott would be inadvisable.

#### Potentially deleterious effects on the APS

► The boycott would have a seriously adverse effect on one particular segment of the APS, namely the Southeast Section, which would have no place in its region to hold its own sectional meetings. This section feels the boycott is unfair to its members. Indeed, their Chairman has written: "Should the boycott be pursued, we would be forced to see what legal relief we could obtain."

► Many APS members regard the boycott as an inappropriate APS activity which, if undertaken, would weaken their confidence in the society's leadership.

► The boycott conflicts with the stated objective of the APS (see APS Constitution, Article II), namely "the advancement and diffusion of the knowledge of phys-

Moellering, Potzick and Hill, would you have taken no stand against the treatment of Jews in Germany or blacks in the South just because these were "divisive social issues," "unrelated issues," "emotional issues?" Some of your colleagues would have been those Jews or blacks and some of them now are women, women who are still subject to situations ranging from economic discrimination to sexual harassment.

If the citizens of a state refuse to back a simple statement of equality before the law regardless of sex (the protection extends to males as well), the APS is justified in exerting whatever financial and moral pressure it can bring to bear, small as that effort may be in the scheme of things, to effect change.

Until half of all physicists entering the profession are female, we will know that true equality has not been achieved.

GERALDINE KARPEL  
El Camino College  
Via Torrance, California

1/18/79

•  
I support women's rights, oppose ERA, and oppose the APS council's recent political boycott action, which prohibits the scheduling of APS meetings in states that

have refused to ratify the ERA.

Women should have equality in many areas, including employment opportunities, opportunities to get a mortgage or start a business, educational opportunities and so on. They should continue to have superiority or privileged status in certain areas, such as exemption from military service, protection from rapists, child custody laws, divorce alimony, and so on. They should continue to have unequal treatment in certain areas which are not the proper domain for government interference, such as higher life-insurance premiums (because women live longer), lower auto insurance (if they drive more safely), higher medical insurance (for pregnancy coverage), and so on.

We should hold physics opportunities open to women but not expect large numbers to join physics, since their preferences lie in other areas. According to the American Council on Education, vol. XXVII, no. 36, women graduating from high school have higher grade-point averages in English, social studies, foreign languages and biological sciences, while men excell in math and physical sciences. The SAT scores in mathematical areas average 494 for men, 444 for women. In ten years the average has declined by 20

ics." A boycott will impede, not advance, this diffusion.

• The boycott is regarded as a purely political action, contrary to the society's long-established policy of staying aloof from politics.

• Even if the APS should not always avoid political actions, this particular boycott appears to be an interference with democratic processes within the United States; such an interference is repugnant to many APS members.

• The boycott would be divisive, in that those members opposing the boycott do not feel it is the sort of action they contemplated when they joined the APS or voted for the society's officers.

► Many members have strong sentiments on a very large variety of issues, for example, retirement age, criteria for employment and educational opportunity (the Bakke case), right to abortion, and so on. Approval of the ERA boycott would mean that supporters of other issues would feel justified in proposing action favoring their particular causes, thus laying the society open to continued diverse debate.

► There may be retaliation against the APS and its membership by boycotted states. Indeed, one state legislature has already refused to approve funds for travel to meetings of organizations participating in the ERA boycott. Before closing, we wish to clarify our willingness to support activities like those undertaken by POPA's Subcommittee on the International Freedom of Scientists, although we have refused to support the ERA boycott. As we weigh the pros and cons, we feel that our support of the dissident scientists abroad is almost their sole resource, does advance

the knowledge of physics, and is so thoroughly backed by the APS membership that there is no possibility of divisive effects. Furthermore, we feel that the action recommended to council by POPA, namely the adoption of the Toll-Gerjuoy motion, will make it plain that APS refusal to support the ERA boycott is neither a rejection of the ERA nor an unwillingness to consider seriously the views of the ERA proponents within the APS.

Elizabeth U. Baranger,  
Harvey Brooks, Bernard L. Cohen,  
Herman Feshbach, Richard L. Garwin,  
Edward Gerjuoy,  
John S. Toll, Gunther K. Wertheim  
Members of POPA

The ERA resolution passed by the APS Council in November differs from the resolution recommended by POPA and reads as follows:

"Whereas the Council of The American Physical Society supports the passage of the Equal Rights Amendment as one step in increasing equal opportunity for women in our society, including helping to increase the presently low proportion of women physicists;

"Whereas The American Physical Society will intensify its activities to assist and encourage women to study physics and to enter physics as a career;

"Be it therefore resolved that until the present Equal Rights Amendment is ratified, or the present period for the ratification lapses, whichever occurs first, the APS schedule general and divisional meetings, beyond those already scheduled, only in states which have ratified (and not rescinded—should Congress permit rescission) the Equal Rights Amendment."

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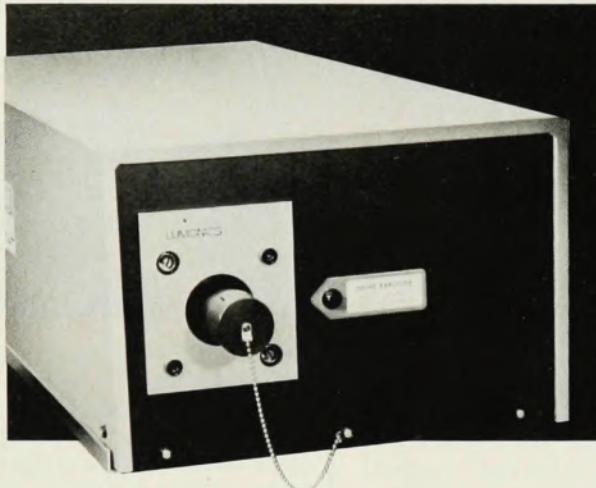
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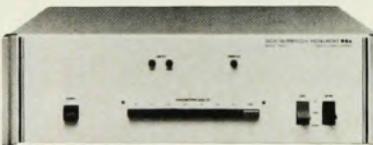
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## letters

for men and by 23 for women, but men have averaged 45 points higher. These differences reflect, at least in part, that mathematical and physical sciences are less appealing to women.

I support efforts to encourage more women to be interested in physics, but only those who would really like it. We should not expect the entire statistical difference to be removable in a free country. There may be a residual effect based on realities of nature.

It is contrary to the scientific method to try to legislate laws and expect nature to change accordingly. So why should we support a too-sweeping approach that makes it illegal for the law to recognize natural differences between the sexes? Is it because biology and psychology are outside of our area of expertise? I for one would advocate a carefully clarified anti-ERA resolution by APS (but not a boycott for those whose states unfortunately support ERA).

STEVEN C. BARROWES  
12/28/78

Starkville, Mississippi

sites, all states that have not ratified the Equal Rights "Amendment." The purpose of this letter is to urge the APS council to reconsider what seems to me a very unwise decision, and to express the hope that the other member societies of AIP will avoid taking similar actions—which seem to me wrong in four main ways:

It is inappropriate for APS to take any action that has such a remote and unclear relation to the progress and propagation of physics or even to its social effects. If we are determined to enter politics, we would do better to boycott states whose congressmen seek to cut science budgets or forbid peer review, or even to campaign against such congressmen. We seem to think that, because the ERA is addressed to worthy purposes, we are obliged to devote our professional society to its support. How about the guaranteed annual income, or government-financed medical care, or higher Social Security payments, any of which might be helpful to some physicists and all of which have worthy purposes—shall APS fight for them, too?

Not only is the decision inappropriate in principle; it looks to me also very impractical. One would think that an organization that has so recently defeated a challenge to its tax exemption would be more cautious now about jeopardizing that exemption again. Surely the privileges enjoyed by educational and scientific organizations are not available to those that engage so actively in domestic politics.

Aside from being inappropriate and perhaps risky to use, this boycott is a poor weapon. It seems to be based on the same principles that are invoked to justify terrorism: if you make innocent people suffer severely enough, they will force the guilty ones to change their ways. Whether one is using bombs or a boycott, one is being unfair in punishing the innocent to influence the guilty. The APS boycott in particular is likely to be ineffective, for I doubt that it will lead hotel-keepers to besiege their state legislatures. Incidentally, I think boycotts are both fair and effective, being aimed directly at their intended targets and causing enough distress to produce the desired actions.

I do not recall that this boycott was part of the platform on which any of the present council ran for office. Nor do I remember any poll of members on the ERA or on this way of supporting it. So those who oppose ERA or oppose this boycott are being misrepresented by an organization that they joined for reasons unrelated to sexism. Their only future recourse, short of resigning, may be to guess how council candidates are likely to vote on coming issues that are peripheral to the main purposes of APS, and vote accordingly. I fear that female candidates may fare worse in the future because

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5/1/79

ANNA K. NABELEK  
IGOR V. NABELEK  
The University of Tennessee

Recently the council of the APS has decided to boycott, by its choice of meeting

continued on page 82

## letters

continued from page 15

people will assume (perhaps wrongly) that they favor such improper actions as the present boycott. Even favoring ERA as I do, I resent the council's decision, and would like to vote against councilors who favored the boycott. I wish I knew who they were.

I do, incidentally, recognize the council's duty sometimes to make decisions on which they do not know members' opinions—but this happens seldom when the issues are directly relevant to the advancement of physics, for the advancement of physics is the reason for the APS's existence and all the members know that. But even on these issues the council sometimes polls the members, unless the decision has to be made on very short notice. I do not think the boycott is either so urgent or so clearly essential to the advancement of physics as to qualify for such nonconsultative decision-making.

So I urge the council to rescind its ill-advised action, or at least to explain to APS members why the action was taken.

INGRAM BLOCH  
Vanderbilt University  
Nashville, Tennessee

12/8/78

**COMMENT BY PRESIDENT OF APS:** The November 1978 resolution of the APS council was passed by a vote of 13 to 10 with two abstentions. It includes a statement of support for equality of opportunity for women in light of their under-representation in physics and a further statement of the council's decision not to schedule any additional divisional or general meetings of the Society in "non-ERA" states during the three-year extension by Congress of the time for ratification by states. The resolution does express support for ERA as it relates to opportunities in science; it does not restrict the locations of topical conferences or sectional meetings. It does not "boycott" ERA states, in the sense that locations for our general meetings through 1984 are already determined. The annual meeting in 1980 will be in Chicago, for example. I urge those who wish to debate the matter further to be sure they read the resolution as actually passed, and not rely on the POPA summary arguments (see above), which refer to a simpler and somewhat more restrictive proposal.

At the Washington meeting of the council (March 1979), a motion was made on behalf of the executive committee of the Division of Electron and Atomic Physics that the resolution be amended by deleting divisional meetings from the resolution's strictures. This would have put the decision back to the division executive committees, permitting different

policies for each division. This motion was debated and failed by a vote of 13 to 7 with one abstention.

The constitution of the Society unambiguously vests in the council the responsibility to make decisions on matters such as location of meetings and other matters of general policy. The councilors are identified on the inside cover of the *APS Bulletin*. Every communication received by officers of the Society from members on this topic prior to the last meeting was distributed to each attending councilor. We will continue to do this in the future.

Many of these letters, on each side of the issue, express deeply felt and carefully argued views. APS members who feel the matter should be considered further by council may wish to express their views to the executive committee of their division(s), and urge the division to instruct its council representative accordingly or write members of the council directly, sending a copy to the Executive Secretary of the APS, 335 East 45th St., New York, N.Y. 10017.

LEWIS M. BRANSCOMB  
President  
The American Physical Society

## At Work

Filtered,  
in between thoughts  
of pi-mesons,  
come conversations  
of people and living  
that escapes the mesh  
thrown up by charged spin  
states  
of mind or other barriers  
that one investigates

People seem always to intrude  
tunneling their way past barriers  
set up  
with no potential for anything  
but keeping away

life  
HAROLD L. FEDEROW  
Oak Ridge Associated Universities  
Oak Ridge, Tennessee

## Chinese honor for Einstein

I, a young scientific literature translator in Shanghai, have with great joy read the news on "Einstein Statue Commemorates Centennial" (January, page 119). Personally I believe Albert Einstein was not only the greatest man of science in the world, but also the greatest philosopher and thinker with a sense of social justice. Whenever I think of his modesty, honesty and ardour for science, it always gives me great encouragement. The enclosed stamps (see figure) were printed by the People's Republic of China to commemorate Einstein's birth.

Albert Einstein was a friend of the Chinese people. According to the historical record of Shanghai, Einstein twice arrived in Shanghai by sea in 1922. The Shanghai people gave him a warm welcome. He visited the Yu Garden on 13 November, the day he was notified of his Nobel Prize award.

I am very interested in science and technology and want to study Einstein's philosophic and scientific thought. I would welcome hearing from prospective pen pals.

MEI CHIA-PING

House 4, Lane 116, ChangShou Lu (Road)  
200040 Shanghai

4/3/79 The People's Republic of China

## Author's ploy

Agnes M. Herzberg's excellent essay on the game of publishing scientific papers (April, page 9) omitted what may well be the most important ploy used by authors to influence editors. It is the footnote that reads, "The author is grateful to [here insert the name of every authority in the field dealt with in the paper] for their helpful comments and review of the manuscript."

S. M. LURIA

Naval Submarine Medical Research  
Laboratory  
Groton, Connecticut

## Ship hydrodynamics

The article by Pierre Lafrance on "Ship hydrodynamics" (June 1978, page 34) was interesting, not so much for what it included on the subject, but for what it omitted. Apart from a brief sentence and a qualitative diagram (figure 2), the article seems to have carefully avoided the subject of the planing hull, which if only in terms of sheer numbers, undoubtedly represents the most important manifestation of ship hydrodynamics (as distinct from hydrostatics) in the current world inventory of air-water interface vehicles. If pleasure craft do not constitute an important enough class to be included in an overview of this type, certainly patrol boats and fast naval vessels, which derive much of their support from Bernoulli rather than Archimedes, deserve at least the same attention given the military or commercial hovercraft and hydrofoil vehicles.

Perhaps the obvious omission of planing-hull hydrodynamics reflects the current level of physical understanding in this branch of naval architecture. If one consults standard available texts on the subject, this suspicion is reinforced. In Saunders's otherwise extremely thorough compendium *Hydrodynamics in Ship Design*,<sup>1</sup> for example, out of a total of 99 chapters only three brief chapters are devoted to planing phenomena. Two are