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letters

to be invulnerable. It is ludicrous to allocate money to procure the missile with the thought that a sensible basing mode will be found.

Let us not delude ourselves; the onward march of technology is making the land-based nuclear missile vulnerable—and there is no acceptable technological fix. Let us not despair; our submarine-based nuclear forces offer sufficient destructive capacity to deter the Soviets from starting a nuclear conflict. Thus the MX is unnecessary. Our security would actually be decreased by its deployment.

It is argued that our participation in the Strategic Arms Reductions Talks (START) will be useless unless the MX goes ahead. It is fallacious to believe that we must be in a position of strength to negotiate. If this is true, then once we are in a position of strength the Soviets will not be able to negotiate.

Our President named the MX the "peace-maker." The "peace" the MX is likely to "make" is an eerie grey lifeless silence following nuclear war.

JOHN MATTOX Stanford University Stanford, California

12/82

Correction from India

In September (page 89) we were happy to read that the Oppenheimer prize had been jointly awarded to Maurice Goldhaber and Robert Marshak.

In this report, however, there is one inaccurate statement to which I wish to draw attention. Marshak visited our institute, Matscience, as the Niels Bohr Visiting Professor in 1963 and not Madras University as stated in the report.

N. R. RANGANTHAN Matscience Madras, India

11/82

Political letters

This is to praise PHYSICS TODAY for printing "gross politically motivated letters" such as those maligned by William Ember (August, page 13) and J. B. Hatcher (November, page 105). Such expressions not only enhance the excellence of this scientific publication, but I for one find them more interesting than letters that leave "scientific purity" intact. Certainly Reagan's program affects research budgets and thus is a legitimate topic of debate among physicists. Likewise, the plight of counterparts abroad is a valid concern. Also, physics has much to do with the

arms race, appropriate technology, the energy issue and other public controversies. So, physics and "politics" overlap; indeed, about half of the news in PHYSICS TODAY falls under "State and Society."

As for which opinions get published, it is not a matter of First Amendment rights, but simply the judgment of the editor. Readers offended by a letter ought to skip it, as Allan Kiron (August, page 13) suggests—consoling themselves with the fact that other subscribers are not so gullible as to believe everything appearing in this column.

WILLIAM E. DEAN University of Texas Austin, Texas

1/83

Trap correction

The photographs (page 50) of three barium ions, two ions and of a single ion (figure 4), which were supplied by me to Arthur Schawlow upon his request, show the ion(s) confined in an electrodynamic or Paul trap. This trap features no magnetic field, but instead a (quadrupolar) radiofrequency field, in contrast with a Penning trap (mistakenly identified in the caption). The experiments to which these pictures pertain were performed by W. Neuhauser, M. Hohenstatt and myself, in collaboration with Hans Dehmelt, at the University of Heidelberg, Heidelberg, Germany.

PETER E. TOSCHEK University of Hamburg Hamburg, West Germany

1/83

1/83

Call for papers

Low-temperature applied physicists interested in cryogenic materials are probably unaware of a relatively new conference: The International Cryogenic Materials Conference, an interdisciplinary conference of interest to materials scientists with backgrounds in physics, chemistry and engineering. In its fourth year, the conference this year will be held in Colorado Springs, 15-19 August. We are especially interested in papers on the cryophysical properties of materials, such as the electrical, magnetic and thermal properties of metals, alloys, semiconductors and insulators for low-temperature applications. Submit 200-400-word summaries and 50-word abstracts by 1 March 1983 to me at the address below.

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