letters

Astronomy in local papers

For some time now, scientists have been distraught at the growth of astrology-related materials in newspapers in the US. Unfortunately, there has not been any corresponding increase in the amount of clear, reliable science reporting available to most newspaper readers. Recently, however, a new series of astronomy and physics articles written by scientists, which has been running successfully in San Francisco area papers, has become available for general distribution in the US and Canada.

Called Exploring the Universe, the weekly series is not a routine observing guide to the naked-eye sky (as can sometimes be found buried among weather reports in many papers); rather the columns deal with current concepts and discoveries in astronomy and

related fields.

Each article is about 500 words long and presents a single idea without the use of jargon or mathematics. However, each column is written either by a research astronomer or science educator and is carefully edited, not just for readable style, but also for scientific accuracy. A sampling of titles will give you an idea of the flavor of the series: "The Search for Black Holes," "Volcanoes on Other Worlds," "Searching for Antimatter by Balloon," "Cloudshine and Moonshine" (on the discovery of molecular alcohol in interstellar clouds), "Time Slows Down in SS 433," "The Largest Object in the Universe," and "What Were the Atoms in Your Body Doing 8 Billion Years Ago?"

The project carries the endorsement of the Task Group on Education in Astronomy of the American Astronomical Society and is sponsored by the Astronomical Society of the Pacific.

At the present time the series is featured in about 15 newspapers across the US and Canada. We would very much like to solicit the assistance of interested PHYSICS TODAY readers in placing the series in other newspapers.

In general, editors are most likely to pay attention if they receive a letter from someone in the local community. We will be happy to send anyone who is willing to write, an information packet (which includes sample columns) to send to the editor. Please include the name of your local paper in your letter to us.

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More high-school teaching

I wish to fuel the debate which has been running in the letters column about teaching high-school physics (May, page 89). I rush to agree with Roger Burkhart, contrary to Robert Feldman's very definite opinions; the public-school teacher is confronted with violence. The university life does not prepare one for the verbal and physical assault found as a way of life in today's schools. Feldman was quick to point out that experience allows a teacher to reduce preparation time—too quick!

An experienced teacher has his plans and demonstrations well prepared. They have been done before. Numerous times. But a good teacher uses this luxury to improve on the good and remove the bad and the time-worn. And apparently unknown to the author, there is the matter that the fundamental skills of today's youth have increasingly worsened. Today it takes more time to read a simple lab report than it takes to prep a full lab. Collegetrained instructors would not have the slightest idea about the teaching of reading and writing, which is now a necessary skill for teachers of the gifted student.

The college instructor is surely involved in teaching full-time with little research. But they never been trained in the art of teaching. Some, nevertheless, become very good and some are appalling.

I quote "The majority of better school systems are willing to pay..." At this I cannot stop laughing. The majority of school systems are offering what is termed "earned retirement incentive credit." Given to a teacher near retirement (with experience and degrees), it is simply a \$10 000 bonus to leave! Economy-minded schools can say goodbye to a person earning \$20 000 and



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next year hire a recent graduate for \$10 000. In the first year of such programs the Board of Education breaks even. And in the second year, after a generous raise given to the newly acquired teacher, the Board pays only half of the previous salary.

Feldman's theory does not jibe with experiment. I have taught very young children physics-which they can and do learn at 12 and 13 with interest and appreciation-for twelve years and I find no evidence to support Feldman's view. Physicists are not taught to teach and teachers are not taught physics. Why do we expect more than 18% of our students to study physics after studying biology for 5 years? You do not believe that the general-science teachers are teaching fundamentals of physical measurement and analysis? After five years of descriptive life sciences taught by good biologists, who would understand physics enough to take an admittedly difficult course of study? Those 18% would not be there if they were not strongly advised to do

Come down out of the tower please. We are not going to develop an interest in physics until we train teachers and begin teaching physics to children. Waiting until they are adults is too late!

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Unification Church

The AAAS Committee on Scientific Freedom and Responsibility has taken note of the Eighth International Conference on the Unity of the Sciences, sponsored and financed by the International Cultural Foundation, which took place in Los Angeles in November 1979. The founder, and Chairman of the Board of Directors of the International Cultural Foundation, is Sun Myung Moon. Moon is also the founder and promoter of the Unification Church, some of the practices of which have received adverse criticism on a number of grounds. From evidence supplied to us in numerous newspaper reports, regarding earlier conferences on the Unity of the Sciences, we concluded that the prestige of the scientists attending the conferences has been used on occasion by Moon and his associates to promote the advancement of the Unification Church. The participants may be unaware of the publicity resulting from their participation in the conference. Under these circumstances I authorized the issuance of the following statement before the conference on behalf of our Committee:

Scientists who are invited to participate in the Eighth International Conference on the Unity of the Sciences should be aware that it is sponsored and financed by the International Cultural Foundation whose founder and Chairman of the Board of Directors is the Reverend Sun Myung Moon. Participating scientists will be unavoidably associated with the practices of Moon's Unification Church which have received repeated adverse criticism on a number of grounds. Publicity respecting preceding conferences has been used in recruiting and in indoctrinating new members into the Unification Church according to reports which have reached us.

Bentley Glass, my predecessor as chairman of our committee, had authorized the issuance of an almost identical statement before the Seventh Conference on the Unity of the Sciences in Boston in 1978. We had, of course, no intention of interfering with the freedom of scientists who chose to attend these conferences; we simply wished to point out possible implications of attendance, of which they may have been unaware.

JOHN T. EDSALL, CHAIRMAN,
Committee on Scientific Freedom and
Responsibility,
1/25/80 American Association for the
Advancement of Science

CONFERENCE PARTICIPANT RESPONDS: It is good if the objections to the International Conference on the Unity of the Sciences (organized by the International Cultural Foundation) are brought to public attention. It is, however, good also if it is pointed out that the conferences are truly interesting. well attended by scientists deeply interested in a harmony between the different sciences and in the basic ideas of all sciences. Actually, I first participated in one of the International Conferences on the Unity of the Sciences because I found the report of their London Conference truly impressive. I appreciate, therefore, that the editor has asked me to comment on John Edsall's letter.

As to the influence of the Unification Church, it surely does not exist as far as the conference itself is concerned. Every participant offers his view freely and without any restraint. And this writer, at least, could not discover any sign that the existence of the conferences is used to attract new members to the church. He did receive many letters sharply criticizing his participation in the conferences and got into contact with the majority of the letter writers. He found their majority to be far leftists who resented the heavily anti-communist attitude of the church. But none produced any evidence that the participation in the continued on page 88 Never before... 200 watts of RF power with incredible versatility. 3200 L spans 250 kHz to 150 MHz. Now there's a completely solid state power amplifier that provides 200 watts of linear power over a frequency range from 250 kHz to 120 MHz. And at 175 watts, the range extends to 150 MHz. Imagine the wide range of applications you can cover with this single Class A linear unit. All you need is any standard signal or sweep generator and you have the ultimate in linear power for RFI/EMI testing, NMR, RF Transmission, and general laboratory applications. And, like all ENI power amplifiers, the 3200 L features unconditional stability, instantaneous failsafe provisions, and absolute protection from overloads and transients. The 3200 L represents a breakthrough in RF power versatility and packaging. Never before has there been anything like it commercially available anywhere! Contact us for a demonstration of the 3200 L and our complete catalog on the other amplifiers in our wide line. ENI, 3000 Winton Road South, Rochester, NY 14623. Call 716/473-6900, or Telex 97-8283 ENI ROC. The advanced

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