

Please don't misunderstand me: I enjoy the cartoons by Harris, and find them very useful in explaining science to nonscientists. But if we portray females as emphasizing "warmth and feeling" over scientific quality, then we should not be surprised when they opt out of "cold and unfeeling" physics. My daughter is representative of the consequence: She is not studying physics—instead she is majoring in biology in order to help save the dolphins.

DIETRICH SCHROEER
University of North Carolina
at Chapel Hill

4/90

HARRIS REPLIES: It's certainly easy to criticize the part of a cartoon one doesn't want to like while overlooking the part one agrees with. Apparently some people are unhappy about the fact that the woman scientist in the cartoon can evaluate an equation and also see hidden meanings in it (that's supposed to be the funny part), while they prefer to ignore the fact that the man depicted is apparently unsure of his work and has asked her opinion. Can you imagine if the man were talking to the woman? There would be an equally tiny uproar stating that women not only are highly competent in math but have greater psychological insight than men do, yet men are always depicted as the insightful ones in a cartoon.

Some months ago a cartoon of mine in these pages (April 1989, page 11) showed one mathematician punching another while saying: "You want proof? I'll give you proof!" Where are the letters saying that this was a disgrace to mathematicians, since they never settle disputes with punches to the nose? They sure don't, but in cartoons they do. Was that cartoon funny? Would it be funny regardless of the sex of the participants? Would it be funny if they were shown having some racial or religious characteristics? Should the readers of magazines vote to select the safest character depictions in cartoons?

SIDNEY HARRIS
New Haven, Connecticut

7/90

Soviet Jewry's Plight Under Perestroika

I applaud PHYSICS TODAY's efforts (March 1990, page 52) to highlight the plight of Soviet Jews within the jaws of *perestroika*. Unfortunately, there is a long history of xenophobia within Eastern Europe, and during times of political and economic turmoil anti-

Semitism raises its ugly head. Though there are never two periods of history that are the same, the template of religious bigotry remains intact, even after the Holocaust and the establishment of the state of Israel. The rise in neo-Nazism and ultranationalism across Eastern Europe not only is frightening but also is a significant setback for the integration of Europe and the development of trans-European governance. Ethnic and racial bigotry is at odds with the growing political pluralism in Eastern Europe.

I fear that Soviet Jews will be adrift in a hostile and changing Eastern Europe. Western countries have not opened their doors to the persecuted; unfortunately the United States has recently lowered quotas on emigration from "liberalized" Eastern Europe. Fortunately, Israel exists and is a haven for Jews. Without Israel, Jews would have no "home" and would be adrift like the ship *St. Louis*, which wandered the world in 1939 without finding a safe harbor, and eventually returned its passengers to Nazi Germany and a certain death. However, it is not prudent to ignore the political ramifications of settling immigrants on the West Bank, as these may further restrict the movement of Jews from the Soviet Union.

PHYSICS TODAY has given a clarion call to the scientific community to take notice of rising ethnic enmity in the Soviet Union. I hope that as individuals, as scientists and as a scientific community we act on this information by demanding that ethnic and racial diversity be held sacred on both sides of the crumbling iron curtain.

STEVEN L. FORMAN
University of Colorado
at Boulder

4/90

Help Erin Find a Place in CERN

In the May 1990 issue (page 74) it is claimed that if Finland joins CERN, this will make "all the nations normally considered part of Western Europe part of CERN." I would like to point out that the Republic of Ireland is not a member state of CERN and has not yet applied to join, although the small high-energy physics community in this country has prepared a proposal to the government stating that Ireland should apply to join and thereby complete the Western European composition of CERN.

Physicists with Irish connections or

backgrounds who wish to support us in this endeavor can do so by writing to the Prime Minister or the Minister of Science, Dail Eireann, Leinster House, Dublin, or to me.

HENRY W. K. HOPKINS
Committee for Irish Membership
of CERN
Department of Physics
Dublin Institute of Technology
Kevin Street College
Kevin Street
Dublin 8, Ireland

7/90

Argentina: Female Physicists, Fiscal Fix

During May and June 1990 I spent four weeks visiting the department of physics at the University of Buenos Aires, Argentina.

There has been considerable talk in the US regarding the lamentable proportion of women in science. Although I could get data on the physics department only, it was apparent that the Argentinians have inducted large numbers of women into scientific professions. Of the 196 physics faculty members at UBA, no less than 67 are female. Of these, 10 hold professorial appointments, 43 are instructors, and 14 are undergraduate instructors. Up to 1989, the physics department had granted 1127 *Licenciatura* degrees (roughly equivalent to our MS), 460 of them to women.

What enables this level of female accomplishment? The answer I was given: day care. Day care was provided on the campus, with charges based on the number of hours per week, the number of children and the mother's salary. US colleagues interested in obtaining more information may contact Licenciada Maria Teresa Garea, Departamento de Física, Facultad de Ciencias Exactas y Naturales, Ciudad Universitaria, Pabellón 1, 1428 Buenos Aires.

Another interesting observation I made is that in spite of Herculean burdens, the faculty members are generally devoted to their educational and research activities. Government support is meager; industrial support is almost nonexistent. (To clarify the role of the present civilian government, I must add that military spending this year is about 0.69% of the GNP.) The monthly salary of a full professor, US \$180-200, is probably enough to provide housing and food for a family of five, but not adequate clothing. The physics library of UBA, the largest institution in the country,

LETTERS

has not kept current since 1973 or so. Computational facilities are completely inadequate: One VAX 11/730 is shared by the 196 faculty members. Laboratories are woefully ill equipped, a major reason, I was told, that most investigations are theoretical. I was assured that such conditions are endemic throughout UBA and at other institutions of higher learning. Nonetheless I could not find any way in which the departmental faculty was inferior to that of any US state-supported institution I know of.

Countries do go through political and economic convulsions, and they need their scientists and educators to recover. However, the prevalent sentiment of my Argentinian colleagues is despair: After all, doormen in apartment buildings earn US \$300 and more there. The feeling of despair can be broken by breaking their isolation. Each of us can take it upon himself or herself to correspond with a colleague—in Argentina or in some other country in similar circumstances. We can send over information on current developments, books and journals that we use but occasionally, and even equipment. Eventually meaningful international and personal collaborations may also result.

May I suggest that US colleagues make use of the Smithsonian International Exchange Service to ship scholarly materials to Argentina? The donor institution bears only the costs of transportation to Washington. I will be glad (814-863-3286) to provide further information; full details are available from Thomas J. Matthews, SIES, 1111 North Capitol Street NE, Washington DC 20560.

I will conclude with an appeal for complete journal volumes and books published after 1973 to be sent to Guillermo G. Dussel, the physics department head at UBA. He has agreed to distribute excess materials to other Argentinian and South American institutions.

AKHLESH LAKHTAKIA
Pennsylvania State University
University Park, Pennsylvania

7/90

Corrections

November, page 36—The "magnetic monopole" cartoon is by Joan Cartier.

October, page 91—Lew Allen Jr received his master's and doctoral degrees in physics from the University of Illinois at Urbana—Champaign.



SCIENTIFIC WORD PROCESSING SYSTEM

"T3 is at the top of the heap in PC scientific word processing"
PC Magazine
Editor's Choice
1986
1988

What you see on your screen is what you get!
No preview mode or mark up language used

"T3 makes very difficult, complex typing very easy to accomplish."
Jessie Stuyvesant, Secretary
Science Applications
International Corp.

Call for a free demo disk today!

THE T³ SCIENTIFIC WORD PROCESSING SYSTEM
An advanced solution for all word processing needs

Mathematics:

$$\int_{-a}^a e^{-x^2} dx = \int_{-a}^a e^{-x^2} dx$$

$$\prod_{j=1}^n \sum_{k=1}^m a_{jk}^2 = \sum_{k=1}^m \sum_{j=1}^n a_{jk}^2$$

Chemistry:

benzoleanthracene

Hydroxyanthracene

Languages: Будем полагать, что в факальной плоскости идеальной оптической системы находится объект пространственно-временных сигналов $E(x, y, z, t)$ в виде $m(x, y, z, t)$. Основное состоит, что оптический сигнал E представляет собой одностороннюю пространственную дифференциальную в среднем квадратическом функцию переменных x, y, z, t — пространственный процесс типа белого шума с нулевым средним.

All the Capabilities
T3 is the solution for any word processing task, including the most challenging in scientific or technical word. Special expressions such as the examples above are produced with T3 and printed on your dot matrix or laser printer.

Graphics Import
T3 is furnished with everything you need to create professional quality output with type-set appearance. Graphics files can be integrated with text when documents are printed.

Up to 25 levels for subscripts, superscripts and special symbols

Advanced page layout and graphics import capabilities

WordPerfect and T_X conversion

T3 SOFTWARE RESEARCH, INC.
1190 Foster Road • Las Cruces, New Mexico 88001 USA • Phone: (800) 874-2383 or (505) 522-4600 • Fax: (505) 522-0114 • Telex: 317629

Call 1-800-874-2383 8-5 Mtn. time

T3 SOFTWARE RESEARCH, INC.
1190 Foster Road • Las Cruces, New Mexico 88001 USA • Phone: (800) 874-2383 or (505) 522-4600 Telex: 317629
WordPerfect is a registered trademark of WordPerfect Corporation. T_X is a trademark of the American Mathematical Society.

Circle number 42 on Reader Service Card

charged particle detection

channelplate charged particle detectors

Our versatile channelplate electron or ion detectors have many advantages. They feature high gain, high saturation levels, rugged construction and easy disassembly, a bakeable divider network, and a range of sizes, mounts, and entrance aperture configurations. They will operate in particle counting or current modes. Shown above are the CP-602, CP-625, and CP-640 channelplate detectors with 18, 25, and 40mm diameter sensitive areas and gain of 10^6 or better.

comstock

1005 ALVIN WEINBERG DRIVE OAK RIDGE, TN 37830 USA
TEL: 615-483-7690 FAX: 615-481-3884
West Germany: Heribert Lehner GmbH Wiernersdorf 04192/5007-0
Japan: Science Laboratories, Inc. Tokyo 03-813-2771

Circle number 43 on Reader Service Card