Opinion

What Next after the Pisa Meeting?

Joint International Meetings are a relatively recent component of AMS activities. The first, held in Cambridge, England, took place in 1992. Since then there have been a dozen more, held on five continents—Africa, Asia, Australia, Europe, and North America. They exude the scientific aura of a large sectional meeting, with registrations varying between 300 and 700 participants, but usually include cultural components matched by few of the sectionals. Begun as an experiment, the now-mature program appears to be a fixture on the AMS scene, having recently received positive endorsements after extensive review by the AMS Committee on Meetings and Conferences, the committee charged with overseeing policy aspects of the Society's meetings program.

Event locations are determined haphazardly, as they depend on the interest and availability of willing partners. A host country must issue an invitation for cosponsoring a joint meeting. While specific dates and sites may be discussed among potential partners in advance, ultimately the guest must leave many such choices to the host, maintaining merely the decision of whether to accept the host's invitation. What strategic site planning does take place is informal. Someone might ask, "Wouldn't it be useful (fun, interesting) to have a joint meeting in Brazil?" Then someone else who knows a person who knows another person well connected on the other side might discreetly inquire through that chain about the existence and extent of reciprocal interest.

Meeting arrangements in North America are less haphazard. Relationships with North American neighbors of the United States are on a unique footing, since it is the American Mathematical Society, not the U.S. Mathematical Society. Standard sectional meetings occasionally have been held in Canada, and future ones are scheduled there, the next being planned for Montreal in May 2002. The relationship with Mexico has been described as "special" by the Committee on Meetings and Conferences. Without defining the term, the Committee encouraged a continued, regular program of joint meetings between the AMS and the Sociedad Matemática Mexicana (SMM). To date there have been five joint meetings with the SMM, all but one held in Mexico. A sixth is being planned for 2004, at a site to be announced somewhere in the U.S.

Just how these events run varies significantly. Conditions, practices, and expectations differ from place to place. Currently host countries are encouraged to take charge of logistical, cultural, and financial matters, making the timing of daily activities and registration fees, among other details, quite unpredictable, yet simultaneously offering unexpected cultural pleasures. Nevertheless, there are certain scientific constants. Invariably there are several plenary addresses, with speakers invited from the

sponsoring societies, and there are Special Sessions, which most participants find to be the heart of the meeting. The international flavor is heightened when Special Sessions have coorganizers from both sponsoring societies, who invite a mix of speakers from the two sides. In some cases the set of Special Sessions is arranged strictly by invitation of a scientific program committee, which consists of representatives from each of the sponsoring societies; in other cases, a few Special Sessions are tied directly to the plenary addresses and the rest arise from proposals by volunteers.

The pace of the international meetings program continues to be measured. Current policy is to have at most one of these events per year, not counting the joint meetings with Mexico. Plans are in place for meetings in Pisa, Italy, during the summer of 2002 and in Seville, Spain, during 2003. Discussions are underway about possible meetings in India, Taiwan, and England. Meetings with Mexico, which have occurred every other year since 1993, will slow to one every three years, by mutual agreement with the SMM.

The primary program benefits are obvious. The meetings provide opportunities to exchange scientific ideas in an international setting and to make contacts for new collaborations and exchanges. Participants often appreciate having a professional purpose for visiting scientifically interesting international locations.

The AMS spends a modest amount (modest, but more than the average net expenditure for a sectional meeting) to help produce these events. It provides travel support for plenary speakers and a few AMS officials, and it pays a modest stipend to the host for those meetings held outside the U.S. Those costs are not offset by meeting income, since few meetings actually turn a profit. Ordinarily the host alone bears the risk of financial loss and reaps the rewards from any profits that do accrue, all calculated with the fixed AMS stipend in place.

Of course, no isolated instance of these international events impacts a large fraction of the Society. By my best guess, AMS members who have attended at least one of them number between 1,500 and 2,500. Attendees give the meetings high marks, both scientifically and culturally. Are those numbers and grades sufficient to justify the costs? Direct benefits are felt most keenly by participants, of course, but collateral benefits slowly percolate throughout the mathematical community. Undoubtedly the vibrancy of the global mathematical community, which certainly depends on many additional factors, is enhanced by the presence of this program. In the absence of any quantification—the AMS has no matrix in place for analysis of comparative cost-effectiveness—I like to believe that this low-cost program possesses a rich enough combination of such direct and collateral benefits to make it financially viable for a long time to come.

> —Robert J. Daverman AMS Secretary

Letters to the Editor

Response to Wright and Boerner

In his letter about Irving E. Segal's cosmology, Edward L. Wright [October 2001 issue] points out a somewhat astonishing but minor blemish of little consequence in what is otherwise a very substantial, if at times controversial, rebuttal of his claims on the part of Segal. More to the point is the fact that Wright's assertion that $3\pi/2$ is an upper bound for his function $E(S_1, S_2)$ in chronometric cosmology (CC) is based in part on the statement, proved wrong in Segal's response, that in CC "a source can appear bright either by being close to the observer or close to the antipode where $\theta = \pi$ and $z = \infty$ ". In fact, Segal shows that the brightness of a source at the antipode must vanish. Moreover, Wright assumes, as he says in his letter, a homogeneous distribution of sources, which is a largely debated and debatable assumption and which is not assumed in CC. Further, Segal has noted several weak points in Wright's statistical methodology and about the reliability of the data he uses that throw much doubt on the empirical values of the function *E*.

We can only agree with the conclusion of Wright to the effect that to be viable a theory must agree with experimental data. This is a point emphasized by Segal and associates in numerous papers in which statistical evidence based on extensive available reliable astronomical data is presented that invalidates Hubble's law (which relates redshift and distance linearly) and is compatible with and even suggestive of the chronometric redshift-distance relation (which, for small redshifts, is quadratic). By contrast, Segal contends that purported evidence in favor of Hubble's law relies on unsubstantiated ad hoc assumptions and wrong statistical analyses.

Such studies of Segal and collaborators have generally been ignored by mainstream cosmologists. One more exception is the Koranyi and Strauss (KS) paper referred to in our January 2001 *Notices* article which professed also to defeat Segal's claims. The essence of Segal's unpublished

rebuttal to the KS paper can be found in an article of one of the undersigned (AD), "Is the Universe Expanding?", to be published in the Proceedings of the International Conference "Scienza e Democrazia/Science and Democracy" held in Naples, Italy, April 20–21, 2001.

As to the proclaimed demonstration of Hubble's law using data on Type Ia supernovae, Segal spells out his total lack of confidence in this approach to the redshift-distance relation in a 1997 paper ["Modern Statistical Methods for Cosmology Testing", pp. 70–71 in *Statistical Challenges in Modern Astronomy II*, Springer 1997] thus:

Today there is a new wave of claims for the validation of the Hubble law, on the basis of observations of another quite nongeneric type of object, namely supernovae. Bold, if not somewhat disingenuous, claims for measurement of the distances to supernovae are made, notwithstanding that the crucial difficulty in extragalactic astronomy is that the distance to a source can never be measured in a truly model-independent way....The 'distances' of supernovae are, like the 'standard candle' character of the bright cluster galaxies, theorized rather than observed. Because of their transience, irregularity, scarcity, and difficulty of classification into appropriate types, the use of supernovae as primary sample objects for cosmological testing would probably serve to moot the redshift-distance relation indefinitely.

Rochus Boerner [October 2001 letters] rightfully calls attention to the important observational work of Halton Arp. In that respect, one should also consult the little known work of Emil Wolf and associates which offers since 1987 an explanation of these so-called

'discordant redshifts' observed by Arp [Conference Proceedings, vol. 60 (1998), pp. 41–49, Italian Physical Society, Bologna, Italy].

In matters of cosmology, as in so many other difficult areas, the search for truth would be better served if all concerned expressed their views with less bombast and more tolerance.

> —Aubert Daigneault Université de Montréal

—Arturo Sangalli Champlain Regional College

(Received August 2, 2001)

Big-Bang Cosmology

I would like to make a comment regarding the controversy concerning the Big-Bang cosmology which has been discussed here. The recent letter of Rochus Boerner [October 2001] purports to give evidence against the Big-Bang on the basis of some observational evidence due to the astronomer Halton Arp, based on high redshift of quasars which are claimed to be physically connected to low redshift galaxies. However, this argument was demolished in 1983 by the eminent astronomers, W. Kent Ford Jr. and Vera Rubin. (See Rubin's book, Bright Galaxies, Dark Matters, American Institute of Physics Press, 1997, pp. 59-61.) Contrary to what Boerner says, the dissident faction of cosmologists opposed to the Big-Bang cosmology is actually a dwindling group of diehards.

> —Joel Smoller University of Michigan

(Received September 18, 2001)

Editor's Note: The discussion of cosmology in the "Letters" column is now closed.

Barnett Lecture Series

The University of Cincinnati has had an annual endowed lecture on number theory since 1975, the I. A. and Fannie Barnett Lecture Series. We are in the process of producing a plaque to commemorate the speakers in this series, but we have some gaps in our history between 1979 and 1985. We have exhausted our local resources.

The list of known speakers is posted at http://math.uc.edu/~mitroj/barnett.htm. If any reader—possibly a former speaker—has information that would help us fill in the missing names, please contact me at mitroj@math.uc.edu. Thanks.

—Joanna Mitro University of Cincinnati

(Received September 13, 2001)

Negotiating Contracts with Publishers

I was very interested in Wilfrid Hodges' article "What Do You Want from Your Publisher?" [November 2001 issue]. I am not any sort of expert in the area, having published but one book. Yet my coauthor Adam Shwartz and I developed a set of desiderata that did not appear in Hodges' list, that I think others may share.

We came up with two primary requirements: low cover price and availability. We got a cover price of \$55 written into our contract for the first vear the book was out. Similar 500+ page books were selling for \$70 or so at the time, so we were quite pleased with this stipulation. We were able to negotiate this by lowering our received royalties. We didn't write the book to make money; we wanted it to be widely available, and so we were able to make what I still think was a very good trade-off. We got a verbal agreement from our editor that our book would not be subjected to a targeted price increase after the year was out, that it would only rise in price as part of an overall price increase. (Unfortunately, we didn't insist that this be part of the contract, and when our editor was fired, and the book sold to a different publisher, the price jumped, at one time up to \$90. After numerous complaints and threats, the current publisher has brought it down to a reasonable \$70.)

Availability means we wanted anyone who wished to purchase the book to be able to do so. This means that we had a very strict definition of what "out of print" means. We had all rights

revert back to us in case the book was unavailable for purchase for three consecutive months, with specifics about the disposition of unsold copies. I nearly invoked this clause in our contract immediately after the book was published; the publisher misplaced the books in their warehouse, and the book was actually unavailable for two months, until I tracked down the problem, even though it was listed as "in print".

Clearly Hodges brought up very important points, such as the existence of electronic as well as paper publishing, and he encourages us to ponder the possibilities. I simply want to point out that there are other considerations that some of us may wish to consider before signing a contract.

—Alan Weiss Bell Labs

(Received October 18, 2001)

Human Rights and the ICM

Upon reading the section on human rights concerns in the article entitled "Next Year, in Beijing" (September 2001 issue), I was struck by similarities with the old official Soviet writings, with which I am only too familiar. These include the following:

- A shift in the perspective from ethical considerations to pragmatic and political issues, the latter being contrasted with the scientific aims of the congress.
- The special emphasis placed on episodes of harassment and detention of scientists. This distorts the picture, since academics as a whole constitute a privileged stratum in a mature marxist society, whereas the majority of victims belong to a wide range of groups among the general population.
- Condescending tolerance directed toward participants who limit their human rights activities to dinnertable conversations—otherwise, beware!

The painful and difficult problem, as I see it, resides not in the availability of visas and guarantees of personal safety, but in sustaining the intellectual objectives of the event without sycophantic kowtowing to a

questionable regime and in minimizing the likelihood of visitors' unwilling participation in unacceptable practices such as benefiting from the proceeds of forced labor or harvested human organ traffic.

I regret that no attempt was made to address this problem in the article and that there was no mention of reliable sources of information (compare with the "human rights in China" website, http://www.hrichina.org).

—Mikhael Gromov Institut des Hautes Études Scientifiques

(Received October 31, 2001)