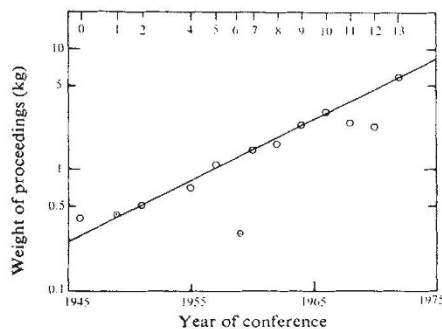


## Weighing words in conference proceedings

**"I predict for the suitably apocalyptic year of 1984 that... LT 17 will take place, its proceedings will weigh half a hundredweight, and they will take over five years to come out."**



THE series of international conferences on low temperature physics has come to be known as 'LT' conferences. The accompanying graph is a log-linear plot of the weight of those LT Proceedings which I have access to, as a function of time and showing the LT number (given along the top abscissa). (On my reckoning, incidentally, the first LT was held at Cambridge in 1946 and not, as the Organising Committee of LT 13\* state, in 1949; it is a very fascinating work, well worth reading, and should perhaps be incorporated into the numerology as LT 0). There are several anomalies which can be readily explained. LT 11 was even more anomalous than is obvious from the graph, for a combination of reasons: it came out quickly (within about five months), quite cheaply (about \$17.00 for two volumes) and included some useful discussion. Other people may choose to draw different lines through the points on the graph, depending on their judgement of possible weighting factors. From my own exponential growth line (and some other input data), I predict for the suitably apocalyptic year of 1984 that, unless some serious steps are taken, LT 17 will take place, its proceedings will weigh half a hundredweight, and they will take over five years to come out.

If it had ever been worthwhile—or possible—to review in adequate detail the contents of these four volumes, which it probably never was, it is certainly not worth while now. The LT 13 conference took place in Boulder, Colorado, well over two years ago (August 1972), and the proceedings have only been saved from the ultimate embarrassment of not appearing before the next conference by the fact that LT 14 will take place three years after LT 13 instead of two, as was the previous custom. Colleagues and friends who have been responsible for producing this almost unbelievably ex-

pensive work of supererogation have had a very hard time of it indeed—a somewhat hilarious time too (for those who were not involved, at least)—which included the hijacking of the plane carrying some of the manuscripts, and its destruction in a Middle Eastern desert. They are to be congratulated and commiserated with on a task which, as far as I am concerned, will be thankless.

Is it really worth all the effort and cost to produce in four beautiful volumes all these contributions which, if valuable enough ought to be made more readily available in regular journals, and if not, ought to sink unobtrusively into oblivion? Short conference contributions are not usually, and certainly should not necessarily be, as complete as papers published in the normal way, and one is never certain when referring to them that they are quite reliable. If they are complete and reliable, and are not published elsewhere because the authors consider them to be published already as proceedings, they are often ignored or forgotten.

The four volumes reviewed here contain more than 500 papers on a vast range of topics—all low temperature aspects of quantum fluids and solids, metals, instrumentation, techniques, and so on—totalling over 2,500 pages. The admirable aim of the organisers was to allot half of the available time to plenary sessions dealing with new developments but of interest to a general audience. The plenary lectures were certainly successful but because of the large number of parallel sessions with contributed papers the plenary papers form only about 3% by number and 6% by pages of the proceedings. In addition, there were special sessions, evening sessions, and discussions, much of which were more interesting and valuable than the contributed work, but not recorded. It is very unfortunate, for example, that probably the most interesting topic, which occupied a considerable amount of private and public discussion time (the newly discovered superfluidity in liquid He<sup>3</sup>) should be found only cursorily reported

under 'Quantum Crystals'. I should like to suggest that the only rational way of dealing with the record of a conference of this size and diversity is to make available at the conference itself fairly detailed abstracts of the papers and properly to publish as a book only a collection of the invited papers whose authors would be aware that they were contributing to a book and not to ephemeral conference proceedings. Everybody would be saved a lot of time, trouble and probably expense, and the result would be much more useful.

Now that the time and effort have, however, been spent it would be unfair not to say that there are many interesting and useful things in the books, as may readily be found by reading through the list of contents. One really astonishing thing is the enormous amount of work on liquid helium, occupying about a quarter of the whole and quite enough for a conference on its own. None of the material can be used, of course, without recent confirmation by ordinary publication or by private communication, with certain exceptions. The exceptions are the established material in the plenary session lectures (each only slightly longer than a letter in *Phys. Rev. Lett.*, although the talks themselves lasted nearly an hour); and, most interestingly from an historical point of view, A. A. Abrikosov's address as recipient of the Fritz London Award (given, alas, *in absentia*) which contains a brief though generous account, which I had come across only by hearsay before, of the way in which Landau, perhaps unintentionally, discouraged him in 1953 from publishing his discovery of vortices in the mixed state of Type II superconductors.

So the conclusion of all this is that all institutions involved with low temperature physics will, if they can afford it, have to buy these books in order to keep their reference literature complete. But it should never happen again, and I sincerely hope that the Organising Committee of LT 14 take note. See the graph. **D. F. Brewer**

*The Social Behaviour of the Bees*, by Charles Michener, which was reviewed in *Nature*, 253, 75; 1975, is available in Britain through Harvard University Press, 126 Buckingham Palace Road, London, SW1, at £12.50.

In the same edition (253, 76; 1975) we published a review of *Our Future Inheritance: Choice or Chance?* This book was written by Alun Jones and Walter F. Bodmer, whose names were omitted from the bibliographical details.

\**Low Temperature Physics-LT 13*. Vols 1-4. Edited by K. D. Timmerhaus, W. J. O'Sullivan and E. F. Hammel. Pp. xv+669. (Plenum: London and New York, 1974.) \$42.00 each.