

**Minutes of the Meeting
of the Irish Mathematical Society**

Ordinary Meeting

21st December 1993

The Irish Mathematical Society held an ordinary meeting at 12.15 pm on Tuesday 21st December 1993 at the DIAS, 10 Burlington Road. 15 members were present. The president, B. Goldsmith, was in the chair.

1. The minutes of the meeting of 8th April 1993 were approved and signed.

2. There were no matters arising.

3. The following correspondence was received:

(i) A letter from the Mathematics Fund For Bosnia-Herzegovina asking for financial contributions from societies and individuals. It was decided that the IMS should not contribute.

(ii) A circular from I. Halperin about the Campaign For Human Rights - An End To Apartheid (South Africa).

(iii) Two letters regarding the Bulletin and two letters regarding the new draft constitution (see below).

4. Bulletin

The Committee has received and accepted a letter of resignation from the editor, J. Ward. The President thanked him for his services. R. Gow has been appointed as the new editor.

The current issue of the Bulletin has been distributed to most individual members of the Society, but 100 more copies need to be printed to cover institutional members and journal exchanges. These will be printed in Bolton Street.

The Committee has decided not to use the Eolas printers in future. P. Mellon had obtained a quote of £690 for printing 400 copies of the Bulletin by O'Brien Printing Ltd, but that company is now defunct. G. Lessells has obtained a quote of £1 per copy



for a similar sized batch from the University of Limerick printers. G. Lessells and E. Gath will be responsible for printing and distributing of the next issue of the Bulletin.

It was remarked that the Bulletin is the most important function of the Society, and that once it is running smoothly the Society should be able to increase its annual membership fees.

Members who are currently refereeing articles for the Bulletin are urged to send their reports to R. Gow as soon as possible.

5. IMS Constitution

A new draft constitution and draft rules have been circulated to members with the last issue of the Bulletin. D. Tipple proposed that the meeting adopt these. This was seconded by M. Ó Searcóid and unanimously accepted by the meeting. D. Tipple then proposed certain amendments to the new constitution and rules. The amendments were seconded by M. Ó Searcóid and unanimously accepted by the meeting.

6. European Mathematical Society

B. Goldsmith has been invited to join the EMS subcommittee on mathematics for developing countries. S. Dineen announced that there will be a meeting of the EMS next August in Zürich.

7. Treasurer's business

The treasurer reported that the Society has around 240 members and that the annual fee is £10 (or \$10 for reciprocity members). Eolas support has diminished over the years, and will possibly be nonexistent next year. The income for next year may therefore be as low as £2400. The Society currently has around £1800 in the bank. In view of this unhealthy financial situation it will be necessary to reduce the Society's support for conferences in the immediate future. He reiterated the suggestion that, once the Bulletin is running smoothly, membership fees may need to be raised.

The President thanked the treasurer for his hard work over the last four years.

8. Elections

The following were elected, unopposed, to the Committee (Re-election to the Committee is denoted by *):

Committee member	Proposed	Seconded
P. Mellon* (Secretary)	R. Timoney	M. Ó Searcóid
M. Vandyck (Treasurer)	D. Hurley	J. Pulé
E. Gath*	J. Pulé	G. Lessells
R. Gow	M. Ó Searcóid	D. Tipple
C. Nash	M. Ó Searcóid	P. Mellon
R. Timoney*	B. Goldsmith	S. Dineen

The following have one more year of office: B. Goldsmith (President), D. Hurley (Vice-President), G. Lessells, B. McCann, M. Ó Searcóid, J. Pulé.

The Committee is to co-opt one member from UCG.

The following have left the Committee: G. Ellis, D. Tipple

The President thanked the out-going Secretary for his services over the last four years.

9. September meeting

S. Dineen and S. Gardiner are organizing the 1994 annual meeting at UCD for 5th and 6th September. It will be followed by a three day conference on polynomials and holomorphic functions. Accommodation will be available on the UCD campus at £13.50 per night.

The 1995 annual meeting will be held at the University of Limerick.

10. There was no other business.

The meeting closed at 1.00 pm.

Graham Ellis
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Galway

A VIEWPOINT ON MINIMALITY IN TOPOLOGY

P. T. Matthews and T. B. M. McMaster

Introduction.

Given a family \mathcal{F} of topological spaces whose point-sets all have the same cardinality, and a particular space X in \mathcal{F} , what should we mean by saying that X is *minimal* in \mathcal{F} , and what use can be made of such a concept?

Well, it depends both on the nature of the family and, critically, on the ordering relation between the spaces which belong to it. If for example we take \mathcal{F} as a collection of spaces all having the same underlying point-set S , and order them by refinement of topology (writing $(S, \tau_1) \leq (S, \tau_2)$ if and only if every τ_1 -open set is τ_2 -open) then we are looking at part of the lattice of topologies on S . Here the *interpretation* of minimality is entirely unambiguous and straightforward: (S, τ) is minimal in \mathcal{F} if, whenever $(S, \tau') \leq (S, \tau)$ and $(S, \tau') \in \mathcal{F}$, then $\tau = \tau'$. The *techniques* required, however, to access minimal objects in this context can on occasions be extremely complex and subtle (see, for instance, Larson [3], Johnston and McCartan [5,6], McCluskey [10], McCluskey and McCartan [11,12,13]) and the resulting insights correspondingly deep: indeed, as has been persuasively argued, "In seeking to identify those [topologies on S] which minimally satisfy an invariant property, we are, in a very real sense, examining the topological essence of the invariant" [11].

Nevertheless there are aspects of general topology for which this approach to minimality is not appropriate. It is often the correct practice (especially when the discussion is in any sense categorical) to co-identify spaces which are homeomorphic to one