## Editorial

Since the appearance of the last issue of the Newsletter, there have been two developments which will be of great assistance in consolidating and developing the production of the Newsletter.

Firstly, as you will be immediately aware on receiving this issue, the printing is a welcome improvement on the duplicated production of the last issue. The National Board of Science and Technology have very generously agreed to print the Newsletter for us, beginning with this issue. The Irish Mathematical Society appreciates very much this assistance from the N.B.S.T., and indeed other forms of support it is providing which you can read about in the Secretary's report. We are indebted to Sean Dineen, the Secretary of the I.M.S., who negotiated this deal with the N.B.S.T..

Secondly, Mathematical Reviews Editors wrote to me requesting copies of the Newsletter as they are interested in reviewing the publication. This is a reflection of the quality of contributions to the Newsletter in the past.

However, there is still much room for improvement. On the technical side, the layout needs to be improved so as to have a more visually attractive Newsletter. On the other hand, the range of articles needs to be broadened. One of the major criticisms of the last issue was that it was an almost exclusively Pure Mathematics publication. I have tried to rectify this by requesting articles from several Applied Mathematicians for inclusion in future issues. In this issue there is some material of particular interest to Statisticians which provides the kind of balance I wish to have between the Pure and Applied areas of Mathematics.

Again, I encourage all members to consider writing for some of the various sections of the Newsletter. For those who may have brief comments on any articles, I intend to introduce a <u>Letters to the Editor</u> section as soon as some material is at hand.

Finally, I take the opportunity to wish all members of the Society a happy Christmas and the best of luck for the New Year.

Donal Hurley

# Dr. James J. McMahon

## Obituary:

J.J. McMahon died in September 1981 after a brief illness. His unexpected passing was a shock to all who knew him, but most of all to his wife, Catherine.

J.J., as he was called, was born at Woodford, Co. Galway in 1924 and went to school at St. Joseph's College, Garbally Park, Ballinasloe. He then studied at St.Patrick's College, Maynooth where he received his B.Sc. degree in 1946 and his M.Sc. in 1948 and was, in fact, the first M.Sc. graduate of Maynooth (in Mathematics). Having worked under J.L. Synge at the D.I.A.S., he obtained his Ph.D. degree from N.U.I. in 1953, and was the first person ever to receive a Ph.D. in Mathematical Sciences from N.U.I.. Be was ordained to the priesthood in 1950.

His early interests were in applied mathematics, studying electricity and magnetism, and quantum theory for his M.Sc..His Ph.D. thesis concerned the hypercircle method. During his stay at Stanford University (1952-54), where he worked with Polya and Szego, he developed an interest in pure mathematics - mainly differential geometry and algebra.

He returned to Maynooth as a lecturer in 1954 under Professor McConnell who was then head of the (single) department of Mathematics and Mathematical Physics. They both lectured the entire range of Mathematics courses (pass and honours). J.J. spent a sabbatical year (1959-60) at Fordham University and in 1960, he was appointed Professor of Mathematics in Maynooth. Another sabbatical year (1972-73) was spent at the University of Ottawa. While Professor, he supervised some master's theses.

In June 1974, J.J. resigned as Professor and became a layman. He lectured for a year at University College, Galway and then spent a term teaching at Worth School, Crawley, Sussex while awaiting a visa for Nigeria. In January 1976 he went to the University of Benin as Senior Lecturer and stayed there until 1979 when he returned to Ireland to take up a position at Thomond College of Education in Limerick.

He was an enthusiastic member of the Committee of the Irish Mathematical Society and was appointed Editor of the Newsletter in the year before his untimely death.

R. Timoney

#### Publications:

- Lower bounds for the electrostatic capacity of a cube,
   Proc. Roy. Ir. Acad. Sec. A 55 (1953) 133-167 (MR 15 425).
- Lower bounds for the Dirichlet integral in Euclidean n-space,
   Proc. Roy. Ir. Acad. Sec. A 58 (1956), 1-12 (MR 18 202).
- Matrix proof of Pascal's theorem, Amer. Math. Monthly
  65 (1958) 24-27 (MR 20 4804).
- (With William Clifford), The rolling of one curve upon another,
   Amer. Math. Monthly 68 (1961) 338-341 (MR 23 A2134).
- Group similar isometries, Proc. Roy. Ir. Acad. Sec. A
   65 (1967) 51-61 (MR 35 4244).
- 6. Lower bounds for the Dirichlet integral, Studies in Numerical Analysis (Papers in honour of Cornelius Lanczos on the occasion of his 80th birthday), Academic Press, London (1974) 219-234 (MR 50 11814).
- SL(2,C) and the Lorentz group, Proc. Roy. Ir. Acad.
   Sec. A 75 (1975) 79-83 (MR 53 725).

#### Appreciations:

J.J., as he was universally known, was a man of great integrity and principle, a very hard worker, thorough and diligent, and anxious to help students. He could appear withdrawn, since he worked quite hard and had few close friends or confidants; however he had a very winning sense of hunour and this, allied with a noticeable twinkling of the eyes, soon dispelled any initial sense of awkwardness.

J.J. was a great outdoors man and regaled me once with stories of scuba diving off the West Coast of Ireland where he was amazed at the variety and colour of underwater life. He was also a keen swimmer, and I also recall a story he told me about being 'dive-bombed' by sea-gulls whilst climbing on the cliffs at Howth Head. That was one time he was really frightened, he said. I am sure he had many more such tales if I could but persuade him to talk about them. In addition I often saw him hurling in the sportsfield with the students and he liked to go down to the midland lakes in May for the 'dapping', when the trout rose to the mayfly.

He was a man with a rugged self-sufficiency, independent mind, and could speak bluntly and fearlessly when occasion demanded. He was very patient and helpful with students among whom he had a reputation for absent-mindedness. There is a story, perhaps apocryphal, that he met a student at the entrance gate after morning lectures one day and engaged in a long conversation with him at the end of which J.J. asked "Was I coming in or going out when you met me?" "Going out" was the reply. "Ah well, I must have had my dinner so" was J.J's conclusion.

A non-smoker, he drank abstemiously and watched his diet and his health carefully. It was therefore, a real shock to find that he died of cancer at the age of 55.

He also had an interest in astronomy and took me out one winter's night to look at the planets through his telescope.

He will be missed greatly by all those who appreciated his inquiring mind, his rugged individual nature, his loyalty to his friends and his unique sense of humour.

David Walsh

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In January 1976, I first met Jim McMahon (or J.J. as he was known in Ireland) when he came out to the University of Benin to join a relative-ly new Mathematics Department about to produce its first mathematics graduates. After a few initial problems adjusting to the climate, Jim soon settled down to teaching in his new environment where his wide knowledge of mathematics enabled him to lecture on courses right across the mathematical spectrum. He played a major role in a revision of the mathematics courses which gave rise to degrees in mathematics, industrial mathematics and mathematics/education. Life at the University of Benin during his time there was never dull: the university was closed on two occasions and several scandals involving those in power brought the university front page headlines in the press. Jim performed his duties unobtrusively and had a quiet laugh at the goings on elsewhere. He got on well with both staff and students: it was thus with great regret that the Mathematics Department bid farewell to him after his decision to return to Ireland.

I was fortunate to meet up with him again in Ireland and was keenly looking forward to renewed mathematical contact as well as occasional encounters on the tennis courts when I moved to Limerick in September 1981. Unfortunately it was not to be.

As Sir Alexander Oppenheim, who had been our Head of Department in 1976, wrote on hearing of his death 'Jim was a man of rare and unusual quality, truly integer vitae, good for all around'. He had been a true friend, mathematically and socially. His death, a great loss to the Irish mathematics community, was also a great personal loss.

Gordon Lessells

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Dr. J.J. McMahon died on 28 September 1981. Only a few weeks previously I had learned with deep shock, almost with disbelief, of his terminal illness. I felt, and hoped, that a miracle would give a new lease of life to one who was still comparatively young and who had, in his own inimitable way, always lived life to the full.

I had known J.J. for almost thirty years, ever since his appointment to the Department of Mathematics in Maynooth in June 1954. Ten years earlier I had met him briefly when he was a second year Science student. It was his turn to act as sacristan-cum-Mass server, in an oratory, popularly known as the 'Synagogue'. Of all the students whom I encountered there J.J. was the only one who remained firmly fixed in my memory. There was something about him that attracted one's attention - a gentleness, a charming simplicity, a beguiling blend of friendliness and deference - that set him apart from other students. When he later became my colleague I remembered him immediately from that first brief encounter.

During his last years in Maynooth we became very close friends, often going on long walks together and having discussions on a variety of topics. During these walks he sometimes became expansive in a way that he never did in the College. He was rather reticent by nature, even secretive. It is true that he was most discreet, but never irritatingly so a roguish chuckle always saw to that. Rarely, if at all, did he wear his heart on his sleeve. The last thing he ever wished to do was to bore his friends with his personal problems.

Others have paid tribute to J.J. McMahon's mathematical expertise. But he was much more than a mathematician. In St. Joseph's College, Garbally Park, he acquitted himself brilliantly in many other subjects ~ Irish, Latin and, in particular, Greek. He always maintained a keen interest in languages. He read and spoke French fluently. He mastered

Spanish while studying at Stanford University, California. German he later added to his linguistic repertoire. Shortly before he left Maynooth he was reading one of Thomas Mann's novels in the original. J.J. was a true philomath.

He also had many non-academic interests. He was amazingly versatile, an all-rounder, a man for all seasons, with more than a dash of Odyssean polutropia. As a student in Maynooth he was, I believe, captain of his class hurling team. He was a keen and experienced mountain climber and swimmer. During the year he spent in an English Benedictine school after leaving Maynooth, he taught himself archery and then taught it to some of his pupils. (I teased him later with being a cryptotoxophilite). Spectator sports were not for him.

His versatility extended even further. When leaving for England he hired a large furniture van in Dublin, drove it to Maynooth, collected all his belongings and then drove to Rosslare, crossed over to Fishguard and continued across Wales and England, getting meals in roadhouses at a reduced rate, (as he told me with a chuckle) just like any other trucker. Later he drove the empty van back to Dublin.

His appetite for knowledge was almost Aristotelian in its range and intensity. Shortly after his arrival in Benin City (Nigeria) to take up a post in the Mathematics Department of the University, he wrote me a long letter, much of which was devoted to en enthusiastic description of the local fauna and flora. He never lost his sense of wonder.

His decision to leave Maynooth and seek laicisation must have been an exceptionally agonising one. I think he was upset by some of the issues raised by the Second Vatican Council. He read extensively in the new theology without, apparently, finding there the reassurance which he so earnestly sought for his priestly ministry. A man of complete intellectual honesty, he was utterly incapable of even diplomatic double—think. He pursued truth with a Socratic singlemindedness. Plato's exhortation 'let us follow the argument whithersoever it leads', could well have been his motto.

I shall always treasure the memory of this lovable, self-effacing man, a most loyal friend who loved to do good by stealth and blushed to find it fame. To me he was the perfect embodiment of Tertullian's anima naturaliter christiana. May he rest in peace.

William Meany