

EDITORIAL

In the last issue, I invited Irish schools to contribute news. There was a limited response. I imagine there were developments elsewhere. Please send reports to

`mailto://ims.bulletin+news@gmail.com`.

As before, to facilitate members who might wish to print the whole issue, the website will carry a pdf file of the whole Bulletin 84, in addition to the usual pdf files of the individual articles. As a further convenience (which may suit some Departments and Libraries), for a limited time a printed and bound copy of this Bulletin may be ordered online on a print-on-demand basis at a minimal price¹.

Next year's IMS Annual Scientific Meeting (also known as the "September meeting") will be held in DCU, on 27-28 August 2020. Please make a note in your diaries. The 2-day programme will consist of a number of invited talks by speakers from Ireland and abroad. The aim of the meeting is to reflect the diversity of the mathematical community in Ireland and the scientific interests of the members of the IMS. All are welcome to attend.

Michael Mackey's report on the AGA meeting, held last May to mark the achievements of the late Richard Timoney, appears in this issue. Just to hand is the special issue of the Mathematical Proceedings of the Royal Irish Academy (Volume 119A, Number 2, December 2019) that contains articles by eight of the speakers at that meeting, including an article by Seán Dineen on the mathematical legacy of Richard Timoney that complements his obituary in Bulletin 83. In the words of Martin Mathieu, editor of the Mathematical Proceedings, we all miss him a lot.

This issue of the Bulletin includes a short paper by C.T.C.Wall on solving cubic and quartic equations by radicals. For your editor, this provided his first encounter with the terms *transvectant* and *catalecticant*, and he counted the day well-spent on that account. Ireland has had a significant rôle in the theory of invariants, with important contributions from George Boole and George Salmon. The December 2019 number of the Notices of the AMS has an article by Moira Chas (*The Extraordinary Case of the Boole Family*, pp 1853–1866), in which she points out that Boole, in one of his earliest published papers, was first to point out the covariance of the discriminant of a binary quadratic form under linear transformations, and that this prompted Cayley to invent the theory of algebraic invariants for forms of higher degree in any number of variables. Dixmier, who was involved in a new wave of work on invariants in the nineteen eighties, kept a copy of Salmon's *Higher Plane Curves* in pride of place on his desk at IHES.

We are in the process of setting up Digital Object Identifiers (DOI's) for the Bulletin and its individual issues and articles. David Malone is looking after this for the Society, and Maynooth University Library staff are kindly assisting.

As we go to press comes the exciting news that zbMATH (the current incarnation of the venerable reviewing journal *Zentralblatt für Mathematik*) is about to become an open access platform, thanks to an enlightened decision of the German authorities. See

<https://www.zbmath.org/static/newsletter/zbNEWS-12.pdf>

¹Go to www.lulu.com and search for *Irish Mathematical Society Bulletin*.

Links for Postgraduate Study

The following are the links provided by Irish Schools for prospective research students in Mathematics:

DCU: <mailto://maths@dcu.ie>

DIT: <mailto://chris.hills@dit.ie>

NUIG: <mailto://james.cruickshank@nuigalway.ie>

MU: <mailto://mathsstatspg@mu.ie>

QUB: http://www.qub.ac.uk/puremaths/Funded_PG_2016.html

TCD: <http://www.maths.tcd.ie/postgraduate/>

UCC: <http://www.ucc.ie/en/matsci/postgraduate/>

UCD: <mailto://nuria.garcia@ucd.ie>

UL: <mailto://sarah.mitchell@ul.ie>

UU: <http://www.compeng.ulster.ac.uk/rgs/>

The remaining schools with Ph.D. programmes in Mathematics are invited to send their preferred link to the editor. All links are live, and hence may be accessed by a click, when read in a suitable pdf reader.

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