

## 25 YEARS OF ETNA: PAST, PRESENT, AND FUTURE

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Much of the work that goes into the publication of mathematics journals is carried out by mathematicians with no essential reimbursement from publishers of these journals. Besides writing papers, mathematicians also referee each other's papers and carry out editorial tasks. Nevertheless, publishers charge quite a bit of money for subscriptions of these journals from universities, or require page charges from the authors. This is the situation now, and has been so for many years and raises the question whether mathematicians can publish a free mathematics journal by sidestepping established publishers. In the fall of '92 and early spring of '93, Lothar Reichel and Arden Ruttan explored whether this would be feasible.

The conditions at Kent State University at the time were favorable to such a venture. One reason for this is that the mathematics and computer science were in a joint department. Arden is trained as a mathematician, with a Ph.D. thesis in Approximation Theory, but subsequently got involved with computing and computers. At the time when ETNA was launched Arden was in charge of the computers and software at the computing facilities of the joint mathematics and computer science department. In particular, he had a good idea of what software was required to start a journal. Lothar and Arden envisioned that the journal should have a web site where accepted papers would be published, and that communication between authors and editors would take place by e-mail. This is commonplace now, but it was not in '92. Lothar and Arden discussed these plans early '93 with Richard Varga, who was the senior numerical analyst in Kent. Richard like the plans. Richard's involvement with ETNA secured authors would submit manuscripts to the journal. After all, during the first years of ETNA, quite a few mathematicians were suspicious about electronic-only publication. Making ETNA an all electronic journal was the only way to keep ETNA free.

Initially, ETNA was available only via ftp, but soon switched to the use of the web browser Gopher and subsequently to Mosaic. The initial editors-in-chief were Lothar Reichel and Richard Varga, and Arden Ruttan was the first managing editor.

Since then, the editorial board has changed and been expanded. ETNA can be free only because numerous editors and managing editors spend their time to help publish papers in ETNA. First Daniel Szyld and subsequently Ronny Ramlau became editors-in-chief. Ronny facilitated that ETNA since 2010 is hosted by the Radon Institute for Computational and Applied Mathematics (RICAM) of the Austrian Academy of Sciences in Linz, Austria. RICAM not only provides the required hardware to host the journal, but also provides IT support to the journal. The latter is mainly done by Wolfgang Forsthuber and Florian Tischler. Their involvement allowed for the development of a new design for ETNA's home page, which has been fully operational since volume 40. Since volume 48 (2018), each published paper is provided with a DOI numbers. The cooperation of the journal with the publishing house of the Austrian Academy of Sciences allowed ETNA to use DOI numbers free of charge.

The most labor intensive part of publication is the copy editing of accepted manuscripts. To give papers in ETNA a uniform look requires effort. Presently much of this work is done by Stefan Kindermann as well as a large number of managing editors. This approach ensures that ETNA stays free of charge for both authors and readers, but it is also a bottleneck for the further development of the journal, as our voluntary managing editors can only copy edit a restricted number of papers per year.

Until today, ETNA remains one of the few fully free journals in mathematics. However, with the Open Access strategy in particular of the European Union, many journals will be free for readers but not for authors. We have to closely follow the developments on the publishing market in order to make sure that ETNA benefits from these developments.