Jeffrey Shallit is professor of mathematics at the University of Waterloo. His email address is shallit@cs.uwaterloo.ca.

1 "...every person should aim to perform at some time in his life some serious useful work for which it is highly improbable that there will be any reward whatever other than his satisfaction therefrom."

Members of the Editorial Board for Scripta Manent are: Jon Borwein, Thierry Bouche, John Ewing, Andrew Odlyzko, Ann Okerson.

DOI: http://dx.doi.org/10.1090/noti1208
Two Paradoxes of Refereeing

The first paradox of refereeing is that good referees are not compensated for doing a good job on time. Instead, they are effectively penalized by additional requests for refereeing, while bad referees (or people who don't agree to referee) are rewarded by having less work to do. I have no easy solution to this paradox, although when good referees submit papers to our journal, we do try to match them with other good referees.

Matching referees with a paper leads to the second paradox of refereeing: very good papers are typically sent to very good mathematicians as referees. Not-so-good papers don't usually get sent to the mathematicians of the highest reputation for two reasons:

1. There are many more mediocre papers than truly excellent mathematicians.
2. You want to conserve the resources of great mathematicians by not asking them very often, and by sending them papers that are deserving of their time.

The result is that very good papers, which get sent to good mathematicians with high standards, might very well have a lower acceptance rate than much weaker papers. I suppose it is the role of the editor to try to adjust for this paradox.

Referee Reports

In twelve years as editor-in-chief, I've seen more than a thousand referee reports, both good ones and bad ones. To paraphrase Tolstoy, good referee reports are all alike: they evaluate the quality and correctness of the paper; give specific, detailed suggestions about how it could be improved; mention relevant papers missing from the bibliography; and end with an explicit recommendation to accept, revise, or reject.

Bad referee reports, however, are each bad in their own way. For example, here is one report I got: “I had a brief look at the paper, not worth my or anyone else's time.” I'm not sure what I am supposed to do with this, even if it's true. I can hardly send it verbatim to the author.

One risk of electronic referee reports that does not seem very widely known is the risk of revealing your identity (name, institution, and so forth) in the “metadata” that accompanies your report. In my experience, this is particularly true of reports that are prepared using Microsoft Word (and one reason that we ask referees not to prepare their reports in this fashion).

Authors

Although most authors appreciate the work done by referees, a few do not. One author, a rather well-known mathematician, fell in this latter class. After I forwarded a report with some reasonable suggestions for improvements, he sent a reply as follows:

I feel bad for you and JIS for messing up so badly. You are hereby granted twenty-four hours to accept our paper subject to the few minor revisions that we agree with, without going back to that stupid referee.

Needless to say, we did not give in to this kind of threat, and the paper was not published.

Another author, upon receiving a negative report from the world’s expert on the subject, complained that our journal is “a forum taken to belong to an elite that think to hold [sic] the absolute truth delivering a decision based on an incredibly deprecatory pseudo review” and attributed the rejection to his belonging to the group of “people that are obviously not in the social network of the journal.” Luckily, responses like this are the exception, not the rule.

Perhaps because of the content of our journal, we also get a nontrivial number of submissions from amateurs claiming to solve major open problems, such as Goldbach’s conjecture. Lately we have resorted to requiring that these kinds of papers be accompanied by a physical (nonelectronic) signed letter from a PhD mathematician at a university, stating that he or she has read the submission and agrees it is correct. This requirement has cut down on our time commitment in handling low-quality submissions.

Plagiarism

Another problem that we've had to deal with is plagiarism. I once had a paper submitted that plagiarized almost word-for-word parts of a paper listed in the submission’s bibliography. I learned this from the referee report, written by...the author of that paper in the bibliography! Needless to say, this was not exactly the smartest move on the part of the author.

Most cases of plagiarism, however, have not concerned mathematical content but arise because the authors of the papers feel their English is not up to the standards of a scientific paper. They “borrow” sections of the introduction of other papers. These authors often don’t seem to understand that what they have done is not legitimate.

Preparing Papers

At our journal, we have no editorial staff to prepare papers, so the job falls on the shoulders of the authors and the editor-in-chief. It’s hard to teach people how to write good papers, but Steven Krantz’s book [4] is a good start.

Our journal relies on \LaTeX as the source code for manuscripts. We have a certain journal style, which we distribute to authors [5] and ask them to follow. Most of the recommendations there are
along the lines of “brush your teeth,” but it’s startling how few authors follow them.

For example, despite the fact that mathematicians are intimately familiar with the notion of using a variable name to denote a numerical quantity, for some inexplicable reason this familiarity does not extend to giving names to theorems, lemmas, and so forth using labels in \LaTeX. Many authors insist on “hard-coding” these references. This choice makes it very hard to revise the paper, since inserting a new theorem requires renumbering throughout.

There is a relatively short list of latex errors that are made again and again by authors [6]. And the American Mathematical Society has a set of packages (amsmath, amscd, amsthm, amsfonts, amssymb) that make life much easier for a mathematician. Use them!

Conclusions
Running an electronic journal has been a great experience for me. I’ve learned a lot about manuscript preparation. I get to see interesting papers before they appear and contribute to improving their presentation. Sometimes I even get inspired to write my own papers following up on submissions. I think I underestimated, however, how much time editorial work would take and the kinds of challenges I would face. Perhaps this brief note lets you know what you’re in for if you decide to do the same.

References
[3] cs.uwaterloo.ca/journals/JIS/
[6] recursed.blogspot.ca/2013/05/ten-common-latex-errors.html

Associate Director Positions
Contact topology, dynamic systems, algebraic geometry, number theory, or mathematical physics
Pohang, South Korea

The IBS Center for Geometry and Physics (IBS-CGP) invites applications for up to 2 Associate Director positions from mathematicians of exceptional research record and leadership in the areas specified above.

IBS-CGP is working to bring the world’s leading scientists in mathematics together with young researchers to collaborate on research projects with passion and commitment. IBS provides an open and autonomous research environment. The existing members of IBS-CGP are working on symplectic geometry and topology, dynamical systems, mirror symmetry, algebraic geometry, and mathematical aspects of quantum field and string theory.

In addition to comprehensive benefits including medical and travel insurance, worker’s compensation, and a retirement fund, IBS-CGP offers:

- Internationally competitive salary (negotiable),
- Dual appointment at POSTECH as a tenured or tenure-track faculty member depending on the candidate’s qualifications (this is subject to review and approval by the Department of Mathematics and the administration of POSTECH. However, POSTECH will respect the recommendations of the IBS-CGP director and the IBS Headquarters as long as the candidate’s qualifications meet the POSTECH requirements),
- Teaching load of 2 courses per year at POSTECH (1 course per year for 3 years chosen by the appointee),
- Generous and flexible research grant,
- Ability to hire 1-2 tenure-track and 3-4 postdoctoral researchers for his/her research group (unlike associate directors, researchers will not be given appointments at POSTECH),
- Free housing of about 105 m² in size at the POSTECH Faculty Apartment for 10 years, and
- Relocation expenses and some educational allowance for up to 2 children for qualified overseas candidates.

IBS and POSTECH encourage applications from individuals of diverse backgrounds. Non-Korean citizens are also welcome to apply.

To apply, please complete and submit a pre-defined application to adapply@ibs.re.kr by February 28, 2015.

An application form is available on our website at http://cgp.ibs.re.kr/. When submitting your application, your email subject should include your name and “Center for Geometry and Physics”.

We are also accepting applications for postdoctoral research fellows. Please visit our website at http://cgp.ibs.re.kr/ for more information.